



Government of West Bengal
(Home Department)

**Report on the Working of the
Flood Warning System
in the
Jalpaiguri District
during the Floods on the
3rd, 4th and 5th of
October 1968**



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S. N. RAY,
25-10-88.

*Maps not printed.

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STATISTICAL BUREAU

72746 Report
Date 20/10/68
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20/10/68

Copy of D.O. letter No. 7277P., dated 15th October 1968, from Shri M. W. Basu,
I.C.S., Chief Secretary to the Government of West Bengal, to Shri S. N. Ray,
I.C.S. (Retd.)

In connection with the very heavy floods which visited certain areas of Jalpaiguri district on 4th October 1968 questions have been raised in some quarters whether the flood warning system of the Government worked properly because it has been alleged that the people in the flood-affected areas did not receive any warning at all and numerous lives which would otherwise have been saved were lost. Government feel that the position should be thoroughly investigated with particular reference to the following matters:

- (1) What are the basic features of the flood warning system in the area in question and which are the officials concerned in the communication of information in the process?
- (2) How the flood warning system actually worked during the aforesaid floods with reference to specific dates and times; and if it did not work properly, whether there are any defects in the system itself or whether there was any failure on the part of any official concerned in the working of the system?
- (3) In particular,
 - (i) whether any flood warning actually reached Jalpaiguri town on 4th October 1968 and, if so, at what time or times;
 - (ii) whether it was duly conveyed to the people of Jalpaiguri town and, if not, who were the officials at fault;
 - (iii) whether conveying the information to the public at the time of its receipt could have averted in part the loss of life and property which followed?
- (4) Any other matters having a bearing on the above questions.

2. Government have decided that an inquiry should be conducted by you on the above lines and are glad that you have kindly agreed to do so. All facilities will be given to you to examine such officials and inspect such records and documents as you may consider necessary for the purpose. You may also decide whether you should examine any members of the public in this connexion.

3. Government express the hope that it will be possible for you to submit within a week a report with your findings and recommendations, if any.

REPORT

I spent the afternoon of 15th October and the whole of 16th October in collecting materials from the Chief Engineer, Irrigation Department, who also very kindly explained to me the principal features of the flood warning system. I spent the 17th, 18th, 19th and forenoon of the 20th October visiting Jalpaiguri town, Mainaguri, Domohani, Mandalghat site up to the breach on the road to Haldibari. I also visited the railway bridge below the Coronation Bridge over the Teesta at Sevoke, where on the eastern side a large portion of the bridge had been washed away along with the abutment.

I met and took evidence of the Commissioner, Jalpaiguri Division, the Deputy Commissioner, Jalpaiguri, the Superintendent of Police, Jalpaiguri, the Superintending Engineer, Irrigation, Northern Circle, the Executive Engineer, Jalpaiguri Division, Shri Naren Kar, the receiver of Wireless messages at Jalpaiguri Police Wireless Station, who, on the 4th October, was on duty from 7 a.m. till 11 a.m. and again from 9 p.m. until the Wireless Station got flooded out round about midnight, Shri D. K. Sanyal, Deputy Collector and Shri M. N. Roy, Fire Brigade Officer, Jalpaiguri.

Among the non-official gentlemen I examined Shri S. P. Roy, M.P. of Jalpaiguri at Chandmani Tea Garden, Siliguri, where he had taken shelter, Shri B. C. Ghose, Tea Planter and a prominent citizen, at his Jalpaiguri town house. I also saw Shri K. N. Das Gupta, former Minister, at his residence at Jalpaiguri. I examined Shri Chikur Chand, M.L.C., and President of Mainaguri Anchalik Parishad at Domohani, and many private persons of Domohani Bazar.

At Jalpaiguri I also saw Shri Debesh Roy (CPI), Shri Debabrata Majumdar (RSP), Shri Niranjan Dutta (SSP), Shri Badal Sarkar, and many others.

I also examined Shri Sushil Kumar Bose, Silt Surveyor, posted at Teesta Bazar, who was doing the duties of the gauge reader at Teesta Bazar (Anderson Bridge) Gauge, as the gauge reader was away on leave. He stuck to his post in heavy rain till it became dark. He left Teesta Bazar and was on his way by land route to Gorubathan. The Superintending Engineer sent him news through a messenger and he came to see me at Siliguri with his records and papers.

On the 17th October I met Dr. (Mrs) Maitrayee Bose, M.P., at the Dum Dum airport. As the plane was more than an hour late to start, I examined her, since she was at Mainaguri on the evening of 4th October and helped in rescue work.

Nearly all the non-official gentlemen I interviewed stated that they had heard rumours from the morning of 4-10-68, of news having reached the officials pointing out to some danger to the town from the Teesta, and several of them made enquiries from the officials and the Control Room whether they had any news of any breach in the embankment or any news of Teesta overtopping the embankment at any place near the Paharpur-Randhamali side. But the only information they got was of flooding at Mandalghat even from the day before, but no news of anything happening to Jalpaiguri.

The report which follows covers all items in the Terms of Reference. I must record that all the officials were extremely co-operative in making available to me all records, papers, maps and in telling me everything that came to their knowledge during the crucial dates of 4th and 5th October. Even the political personages readily came and told me whatever they knew.

A detailed examination of all the material collected has taken me more time than I anticipated. As I am anxious to submit the report as quickly as possible, any typing mistakes may be excused.

In the body of the report I have found fault with some officers for not alerting the residents of Jalpaiguri town even by 4.30 p.m. on 4-10-68, about the possibility of danger to the protection embankment on the right bank of the river alongside Jalpaiguri town. I have also referred to public criticism that relief first came from students of Siliguri on the 6th of October when news of the disaster reached Siliguri in the morning.

I must point out that once the officers and the public experienced the utter destruction caused by the flood waters, and all remained without food or water for hours, they were left in a state of shock and were not in a position to be alert and active immediately having worked round the clock until the very last moment before the waters drowned the city. It is for this reason that they had informed and were relying on aid from the Army to reach quickly. The public were in praise of the rescue work of marooned people in the Darjeeling and Jalpaiguri districts by IAF helicopters and food dropping by planes. The construction of the pontoon bridges across the Karala river by the Army was also greatly praised, as was the part played by Army Jawans and vehicles in restoring road communications. But all this took place some days after the floods.

Re.: Paragraph (1) of Chief Secretary's D.O. No. 7277P., dated 15th October 1968.

What are the basic features of the flood warning system in the area in question and which are the officials concerned in the communication of information in the process?

Jalpaiguri district has many rivers, all flowing either from the hilly tracks of Sikkim and Bhutan or from the hilly areas in Darjeeling district and from the foothills to the immediate north of the eastern part of Jalpaiguri district. Flood warning stations are located at gauge levels on the following rivers—Mahanadi, Teesta, Jaldhaka, Diana, Torsa, Kaljani and Raidak.

The flood warning system of the Irrigation Department is contained in a secret booklet (Annexure I) which is circulated to all important officials of the civil department (e.g., Divisional Commissioner, Deputy Commissioner, Superintending Engineer, Irrigation, Executive Engineer, Irrigation, etc.). A copy of the booklet received by me from the Chief Engineer, Irrigation, (Shri R. B. Chakrabarty), is annexed to this report to show how the flood warning is communicated to a large number of officials who may be concerned to take steps on receipt of information of a possibility of floods. Irrigation officers, both high and subordinate, are informed because they have to take steps to watch the embankments and to have persons ready to repair any leakages or breaches in the embankments at the earliest possible stage. The administrative officers, e.g., Deputy Commissioner down to B.D.O., are to render all help during repair work and also to warn the public of the dangers of flooding so that they may take steps early to save their lives and property as best as they can and to arrange for rescue work of people who are marooned in the flooded areas and to arrange for their relief after rescue by distribution of food and clothing.

As far as the river Teesta is concerned, the sites of the gauges for taking water level are:

(1) Teesta Bazar (Anderson Bridge).

Danger Level	..	676.00 G.T.S.
Extreme Danger Level	..	683.00 G.T.S.

(2) Domohani.

Danger Level	..	274.00 G.T.S.
Extreme Danger Level	..	276.00 G.T.S.

(3) Jalpaiguri (King's Ghat).

Danger Level	..	266.00 G.T.S.
Extreme Danger Level	..	267.50 G.T.S.

The gauge reader at Teesta Bazar (Anderson Bridge) takes gauge readings every hour and records them in a register. Whenever the level reaches the "warning level" or the "extreme warning level", he writes out the message on

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paper and sends it to the Police Outpost at Teesta Bazar. The receiving officer telephones the message at once to the Wireless Station at Kalimpong. From Kalimpong the message is repeated by Wireless to the Wireless operator at Jalpaiguri. A list of officers to whom the message is then transmitted over the telephone will be found in Annexure 'A'. It will be seen from this that all important civil officers of the district from the Divisional Commissioner are given this message by telephone, including the Superintending Engineer, North Bengal Circle, and Executive Engineer, Jalpaiguri Irrigation Division. The Deputy Commissioner and the Superintendent of Police, Cooch Behar, also receive the message by radiogram from Jalpaiguri Wireless, as well as the Sub-divisional Officer (Civil), Mekhliganj.

A list of officers to be informed about warning messages by the gauge reader at Domohani are given in Annexure 'B'.

A list of officers to be informed about warning messages by the gauge reader of Jalpaiguri (King's Ghat) will be found in Annexure 'C'.

Re.: Paragraph (2) of Chief Secretary's D. O. No. 7277P., dated 15 October 1968.

How the flood warning system actually worked during the aforesaid floods with reference to specific dates and times; and if it did not work properly, whether there are any defects in the system itself or whether there was any failure on the part of any official concerned in the working of the system?

The flood warning system during the recent floods on the 3rd, 4th and early portion of 5th October 1968 worked well, meaning that till the last possible moment gauge readers were doing their work and messages were being sent to the officials concerned until Teesta Bazar (Anderson Bridge) was overtapped, and Domohani Bundh breached. The mere conveying of these warning messages is not enough. In my opinion the flood warning rules should be supplemented by the issue of detailed instructions as to what should be done by the officials, both on the civil side and the irrigation, to cope with the situation and undertake rescue operations if floods do come. It should also be specifically stated that warnings of danger level having been crossed and extreme danger level reached or crossed should be communicated to the people by suitable means at least within an hour of the receipt of the message. How the message should be communicated to the people should be left to the discretion of the Deputy Commissioner|District Magistrate or the S.D.O.'s concerned. In the town area like Jalpaiguri, the message can be sent by Government vehicles carrying loudspeakers. In the rural areas messages can be given by chowkidars or village officials through megaphones made out of cardboard kept prepared at the thanas and B.D.O.'s office. The defect in the system is that these warnings are not taken seriously with the result that whatever calamities occur at great intervals. During the intervening period the seriousness of the warning system is forgotten by everybody concerned. The Deputy Commissioner, Jalpaiguri, had not seen the flood warning rules himself and was not aware whether his office had got a copy. I have checked up from the Irrigation Department Secretariat that a copy of the Rules was sent in 1963 to the then Deputy Commissioner, Jalpaiguri, and to Shri Ivan Surita, the then Commissioner of Jalpaiguri Division with headquarters at Siliguri. As the Deputy Commissioner had not seen a copy of the Rules no wonder he was hoping to get some enlightenment from the Irrigation experts and took no initiative on his own.

Re.: Paragraph (3)(i) of Chief Secretary's D. O. No. 7277-P., dated 15th October 1968.

Whether any flood warning actually reached Jalpaiguri town on 4th October 1968 and if so, at what time or times?

On the 4th October 1968 the gauge reader took reading at 05.00 hours. He sent the following message to the Police Outpost at Teesta Bazar:—

"Teesta (Anderson Bridge) Gauge crossed warning stage level at 05.00 hours, i.e., water-level 676.00—rising rapidly."

This message was received from Kalimpong by the Deputy Commissioner, Jalpaiguri, through the Jalpaiguri Wireless at 07.25 hours.

The second message was received by the Jalpaiguri Wireless at 08.21 hours—

"Teesta Bridge Gauge crossed extreme warning stage level (683.00) at 07.30 hours today (4th October 1968)—rising rapidly."

At 3.25 p.m. the gauge reader sent the following message to the Outpost:—

"Teesta (Anderson Bridge) rises 2 ft. above extreme warning stage level, i.e., water level at 686.00 at 15.30 hours."

This message was also written out by the gauge reader and sent to the Police Outpost for communication to Kalimpong Wireless. The message was returned from the Outpost with the endorsement that telephonic communication with Kalimpong had ceased to exist and so no message could be sent.

From the registers kept by the Silt Surveyor (who did the work of the gauge reader on leave) it appears that further readings were taken. The reading at 5.30 p.m. shows level at 690.00. The last gauge reading was taken at 6.00 p.m. which was 692.00. All the marks on the rock showing the levels had disappeared and he was unable to take the exact level but guessed that the river level was rising very rapidly. Soon after 6.00 p.m. there was a strong wind and heavy rain and it was also getting dark, so the officer left the Gauge Station and went to his office nearabout the bridge. According to him the Anderson Bridge gave way at 11.30 p.m.

Depending on the fact whether the flow of water is impeded by temporary obstructions caused by landslips in the upper region, the flood waters passing through the Anderson Bridge would take five to nine hours to reach the railway bridge over the Teesta at Jalpaiguri. Thus the message received at Jalpaiguri at 8-15 a.m. regarding the water at Teesta Bridge rising rapidly having crossed the extreme warning stage 7.30 a.m. at Anderson Bridge is estimated to have reached the Jalpaiguri railway bridge area latest by 4.30 p.m. or so and reached King's Ghat without any danger to Jalpaiguri town. The flood waters that breached the railway guide bundh at Domohani at first and then washed the guide bundh on the Jalpaiguri side, i.e., the right bank of the river, should have crossed the Teesta Bridge at Teesta Bazar somewhere between 3 p.m. and 7 p.m. But as noted in the previous page no message from Teesta Bazar could be sent to the outside world even at 3.30 p.m., when the Teesta Bazar-Kalimpong telephone line went out of order.

Re.: Paragraph (3)(ii) of Chief Secretary's D. O. No. 7277-P., dated 15th October 1968.

Whether it was duly conveyed to the people of Jalpaiguri town and, if not, who were the officials at fault?

The Divisional Commissioner, the Deputy Commissioner, the Superintendent of Police, the Superintending Engineer, Irrigation, and the Executive Engineer, Irrigation, were examined by me orally. The Deputy Commissioner and the Executive Engineer have also put in written statements which will be found in Annexures 'D' and 'E'. A perusal of these two documents makes it quite clear that neither of the two warning messages sent by Kalimpong Wireless and received at 07.25 hours and 08.21 hours respectively was conveyed to the public of Jalpaiguri town at any stage.

In the Log Book (Annexure 'F') maintained in the Control Room by the Deputy Commissioner, Jalpaiguri, the following entry occurs:

"4-10-68—Tecsta Bridge Gauge crossed extreme warning stage level (683.00) at 07.30 hours.

07.45 a.m.—It is likely to reach Jalpaiguri at 15.00 hours. All concerned warnned."

The words "All concerned warned" referred to all officials but not any member of the public. The two written statements of the Deputy Commissioner and the Executive Engineer require careful perusal. Evidence of the Divisional Commissioner, Deputy Commissioner, Superintendent of Police, Superintending Engineer, North Circle, stationed at Jalpaiguri, and the Executive Engineer, Jalpaiguri Division, show that the officers depended on Irrigation Department officers to tell them that the messages, particularly the second message, meant that there was danger of breaches in the embankment protecting Jalpaiguri town which would threaten the lives and property of the town inside the Teesta bundh. On the other hand, the evidence of the Irrigation officers shows that on receipt of the two messages from Kalimpong on the morning of 4th October, the Irrigation officers took it for granted that it was the duty of the civil officials to convey the warning messages to the public of Jalpaiguri town. The Divisional Commissioner said that at 11 p.m. on the 4th October he was with the Superintending Engineer, Irrigation, near King's Ghat Bridge and he enquired from the latter whether there was any danger to Jalpaiguri town by any breach in the Teesta Bundh. In reply to this question the Superintending Engineer stated to him that the way water level was rising no one could say what might happen and that he was a bit worried. 'কখন কি হয় বলা যায় না, যে ভাবে অন বাড়ছে, আমি একটু চিডিত আছি'! The Superintending Engineer also stated that the right embankment of the Teesta river was sturdy and safe. When I had both the Divisional Commissioner and the Superintending Engineer before me to discuss this particular point the Superintending Engineer later stated that the reference to the bundh being sturdy and safe was to the bundh in the vicinity of King's Ghat. In any case this talk between the two at about 11 p.m. with reference to the rising of the water level at King's Ghat was relevant in regard

to the possibility of flood in the Mandalghat region to the south of Jalpaiguri town, which region had already been flooded much earlier. The Executive Engineer, Irrigation Department, has in his evidence and written statement (Annexure 'E') stated that he informed the Deputy Commissioner, Jalpaiguri, over the telephone round about 00.30 hours on 5th October 1968, i.e., at midnight of 4th October that all the flood embankments along both banks of the river Teesta had become unsafe as the water level had already reached much higher than that for which both the embankments had been designed and that he had requested the Deputy Commissioner, Jalpaiguri, to keep himself awake throughout the night. This statement was squarely denied by the Deputy Commissioner. The Log Book (Annexure 'F') written by the Deputy Commissioner at the temporary Control Room set up stated that on 5th October 1968 at 12.15 a.m. the Executive Engineer, Irrigation Department, informed him that flood water had caused a "bore" in the embankment near Paharpur and it was necessary to plug the bore at once. The Executive Engineer asked for a vehicle as his jeep was out of order. The Deputy Commissioner advised the Executive Engineer to take a jeep from Kotwali P.S. In any case any warning by the Deputy Commissioner that anything might happen to the embankment at such an hour would have hardly helped as evidence shows that when some time later the Executive Engineer got a vehicle from the Kotwali P.S. and tried to proceed to plug the seepage near Paharpur he could not proceed on account of the water on the road leading to the site of the bridge.

Earlier at 10 p.m. on receipt of a telephone call that the inmates of a school called Sishumahal were marooned, the Deputy Commissioner arranged to rescue them and they were rescued. This institution is near the Karala Bridge (completely destroyed by the floods) on the right bank of Karala river and to the south of the bridge.

Shri S. P. Roy, a Member of Parliament and one of the important Indian Tea Planters of the district, stated in his evidence that at 4 p.m. the Manager of Raipur Tea Estate belonging to him said that the low lying area of the Tea Estate on the river side of the bundh was getting submerged. Shri S. P. Roy tried to contact the Deputy Commissioner but was told that the Deputy Commissioner was engaged and he actually contacted the Superintendent of Police at 4.50 p.m. He asked the Superintendent of Police as to whether he had any information that Randhamali Bundh had been breached but the Superintendent of Police said that while Mandalghat further down stream had been flooded by breaches, there was no damage upstream, at least he had no information at the Control. The Superintendent of Police in his evidence stated that at 5.30 p.m. Shri S. P. Roy wanted to know whether there was any threat to the town and if he had any information regarding breach in the bundh which might threaten Jalpaiguri town. The Superintendent of Police had stated that "there was some apprehension regarding Mandalghat, Barnes and Mainaguri and Police parties had been sent there and that a Control Room had been opened in Jalpaiguri town which was in operation.

There was a rumour afloat, mostly due to a message given by the local Press Correspondent of the newspaper *Jugantar*, that on the afternoon of the 4th October a closed door meeting was held between top ranking Congressmen and

the Divisional Commissioner to decide whether the town people can be warned or not. It was further stated in that news item that it was decided not to warn the people lest there should be unnecessary panic. Shri K. N. Das Gupta, former P.W.D. Minister, was not in favour of warning the people but Dr. Charu Sanyal had opposed this move and wanted the public to be warned. On being examined, Dr. Charu Sanyal told me that the news item was a complete myth and that he had sent a rejoinder to the *Jugantar* which had not been published even on the 18th of October. Shri K. N. Das Gupta and the officials denied that there was any such meeting held. In any case, Shri K. N. Das Gupta was caught in his house in his bed room and he had to be rescued by being hauled up by a rope while he was standing on the top of a table which itself was supported by another table underneath. A hole had to be dug in the corner of the roof through which hole he was rescued. Had Shri Das Gupta any fear of Jalpaiguri town being flooded he would not have been caught so badly himself together with his family at 3.15 a.m. on the 5th of October.

The Superintending Engineer himself along with some subordinate staff living in outhouses of his compound were faced with water rising so rapidly after 3.15 a.m. on 5th October 1968 that the Superintending Engineer had to send news and call up several of his subordinate staff to come to the first floor of his quarters. This shows that he himself also never realised that the embankment on the right bank of the Teesta would be breached. Although they found the civil officials not taking the warning messages received on the morning of 4th October 1968 from Teesta Bazar and the later messages of the rise in the level at Domohani at all seriously, if they themselves had realised the danger they would have taken some action to warn the public or even their own staff and not be caught by the surging waters of the Teesta after the right embankment had been breached.

Paragraphs 8, 10 and 13 of the written statement (Annexure 'D') of the Deputy Commissioner clearly show that so far as Jalpaiguri town was concerned, the Deputy Commissioner never realised the significance of the warning messages in their applicability to Jalpaiguri town. In para. 14 the Deputy Commissioner has said that until 03.45 hours of 5th October 1968 he had no information that the Teesta embankment was in danger of being breached and that he realised the danger only at 03.45 hours on receipt of a message from the Executive Engineer, Irrigation, that the town was gripped by heavy floods.

Before reaching any conclusion regarding which officials were at fault for not conveying flood warning messages received on the 4th October to the public of Jalpaiguri, I would state that although according to flood warning rules, the messages are to be written as "DANGER LEVEL" and "EXTREME DANGER LEVEL", in actual practice the messages from the Anderson Bridge Gauge always used the words "WARNING LEVEL" and "EXTREME WARNING LEVEL". On my return to Calcutta the Chief Engineer, Irrigation, at my request tried to find if by any circular the warning had been changed but neither in his Directorate nor in the Irrigation and Waterways Department any such circular authorising alteration in the words of the flood messages to be sent was traceable. In my opinion the wording "DANGER LEVEL" and "EXTREME DANGER LEVEL"

are much more significant than the words "WARNING LEVEL" and "EXTREME WARNING LEVEL". The very mention of the word "DANGER" conveys a positive threat to safety. A message saying that the river has reached "EXTREME WARNING LEVEL" seems to be somewhat weaker in its meaning. In any case the word "EXTREME" is of sufficient significance and in my opinion the civil authorities should have communicated the warning messages to the public in the morning of 4th October 1968. When the Superintending Engineer, Irrigation, and the Executive Engineer, Irrigation, realised that the warning was not conveyed to the people they should have made a specific request to the civil authorities to warn the public. Even the gauge reading at Domohani later in the day did not give rise to any apprehension in the minds of the officials at Jalpaiguri that Jalpaiguri town may be flooded, though Mandalghat had already been flooded much earlier and instructions for rescue operations were issued to local officers by the Deputy Commissioner at 7.15 a.m. on 4th October 1968. In fact by 16.35 hours on the same day Army help was called for to cope with the flood situation in Mandalghat by sending a message to the Commander, Hq., XXXIII Corps Artillery Brigade, C/o 99 A.P.O. (vide D.C.'s Log Book, page 3).

All the above goes to show that even after the Irrigation officials had information about threats to Domohani and Barnes on the opposite bank and Mandalghat to the south of Jalpaiguri town, none of the officers either of the Civil Branch or the Irrigation Department apprehended any real danger to the town.

The Chief Engineer, Irrigation and Waterways, Shri R. B. Chakrabarty, has prepared a note (Annexure 'G'), a copy of which was sent to the Chief Secretary by his Memo. No. 77401(3)-C.I., dated 14th October 1968 (Annexure 'G'). In the last para. of the note at page 3 he has stated as follows:—

"It may be mentioned here that the 'Crossing of E.D.L. Rising rapidly' at Teesta Bazar is the last word in flood warning from that Station and it has probably been the only occasion so far that the said warning had to be issued. No doubt the Jalpaiguri and Barnes Embankments stood the test of time but that was in respect of floods corresponding to warnings of a much milder dimension than used during the October (1968) flood. It has therefore been most unfortunate if the ultimate warning had been confused with other milder warnings."

But on examination of the registers of the Silt Surveyor who took gauge readings at Teesta Bazar on the 4th October 1968, I found that in 1962 the gauge at Teesta Bazar (Anderson Bridge) showed on the 24th August 1962, a level of 683.824 (the extreme danger level being 683.00 G.T.S.). Again on the 27th August 1962 the gauge reading was 684.323 G.T.S. Thus even six years ago the *extreme danger level* warning had been sent but the embankment had stood the test. I am mentioning this merely to say that the experience of the officials at Jalpaiguri town that the Teesta right bank embankment had stood through the years, many warnings of the level at Anderson Bridge having passed the danger level, and at least twice the extreme danger level, had made them lose the significance of these warnings.

I am quite convinced in my own mind that although the flood warning messages were being delivered correctly, the receipt of these messages had become a routine affair and very little activity was shown by all concerned to prepare themselves or prepare the public against possible danger to Jalpaiguri town itself.

Irrespective of the fact whether warning the public on the morning of 4th October 1968 would have saved many lives and any considerable amount of property as also important records, all the same I am of the opinion that the Deputy Commissioner, Jalpaiguri, should have warned the public that the Teesta had crossed the extreme danger level at Tecsta Bridge and that there was a possibility of a very heavy flood coming down the Teesta near Jalpaiguri at a later hour. If the floods did not occur, some people might have regarded the Deputy Commissioner as an alarmist but the blame would have been well worth it. By not giving a warning, as he should have done, he has incurred the severe displeasure of numerous persons who have lost members of their families or lost their valuables. Those who had lost their lives are in no position to apportion any blame.

To some extent the Divisional Commissioner is also to blame since he is a senior officer and was in touch with developments all through, although he was not familiar with conditions in Jalpaiguri town, having moved his office from Siliguri to Jalpaiguri recently. Even if they did not take the 8.15 a.m. message on the morning of 4th October seriously they certainly should have warned the public round about 5.30 p.m. after the Deputy Commissioner got information from the B.D.O., Mainaguri that Domohani, Barnes, Dharmapur and areas of Mainaguri Block had been affected and ten square miles involving two thousand people were in danger. At 4.30 p.m. they had already asked for help from the Army to cope with the flood at Mandalghat and Domohani and I am surprised that even at this stage it did not strike them to warn the Jalpaiguri town people regarding the possibility of inundation by Teesta floods.

The Superintending Engineer, Irrigation, was at Jalpaiguri in close touch with the developments and he also should have advised the civil officials, namely, the Deputy Commissioner and the Divisional Commissioner, to warn the people of the possibility of grave danger. If the Deputy Commissioner and the Divisional Commissioner had advised against this, then he should have informed the Irrigation Secretariat at Calcutta for orders or rung up the Chief Engineer on the afternoon of the 4th October.

The same applies to the Executive Engineer, Irrigation, who, however, in the presence of the Superintending Engineer and was going about with him all the time, could not take the initiative on his own.

**Re: Paragraph 3(iii) of Chief Secretary's D.O. No. 7277P.,
dated the 15th October 1968**

Whether conveying the information to the public at the time of its receipt could have averted in part the loss of life and property which followed?

In my opinion if the last message received by the Jalpaiguri Wireless at 08.21 hours on 4th October 1968 had been communicated to the public by beat of drums or by cycle-rickshaws carrying loudspeaker, activated by motor batteries, then lives of many old men, women and children might have been saved, and certainly the lives of the poorest inhabitants of Jalpaiguri who, during the course of the day, might have moved to areas away from the Karala and the Teesta rivers to higher levels of the town itself which were not inundated and silted so badly, or not at all.

On 4th October 1968 at 4.15 p.m. Shri S. P. Roy, M.P., after receipt of information from the Manager of his Raipur Tea Garden that water was entering the lower portions of his Tea Garden submerging some cooly lines, rang up the Superintendent of Police at 5-30 p.m. to enquire whether there was any official information regarding breaches in the bundh near Paharpur. He was told by the Superintendent of Police that there was some apprehension regarding Mandalghat, Barnes and Mainaguri and that relief parties had been sent, but that he had no information regarding any threat to Jalpaiguri town embankment. Even after this Shri S. P. Roy took no action to remove himself and his family to Siliguri. This he did some days after the flood waters had subsided. In fact men of the upper and the middle classes as well as ordinary people were not alarmed of the rise of water level of the Teesta river. Even at 11 p.m. or so when the Karala river which reached its maximum level inside the town people discussed amongst themselves after going out in the dark to watch the water level in the Karala that as all the water in that portion of the Karala was still clean water (সাদা জল) the risc was not due to Teesta waters entering the Karala through the breach in the Paharpur bundh. As soon as the bundh was breached near Paharpur the rush of water pressed against the Karala water and displaced it to the southern side of the town by which the first inundations took place and water rose in the streets and houses. It was only within a few minutes when muddy water started coming in overtopping the Karala banks that they realised that the Teesta waters had come up through the breach and entered the Karala river. The people of Jalpaiguri town had often seen a portion of the town being inundated by rise in the waters of the Karala specially the portion where the bungalows of the Deputy Inspector-General and others are situated. Few of the middle class men except the very nervous ones would have taken any steps to move away from the town after any warning that might have been given in the morning as they would not be willing to leave their valuable properties behind and go off, leaving them to the mercy of thieves and burglars but they might have sent their families to safer regions. It was only the poorest who possessed neither land nor cattle nor any possessions to speak of, persons whose sole possession consisted of a

few rags, a few pots and pans and some covering for their bodies who might have gone away to safer places outside the town, as they had nothing valuable to leave behind. The fact that even richer people who had alternative accommodation at Siliguri never moved at all even after news of the breach at Domohoni, shows that they were sure in their minds that the Jalpaiguri side of the embankment would withstand the flood waters of the Teesta. The floods were so unprecedented and far exceeded all human calculations as to its velocity and magnitude that practically no moveable property could have been saved but some persons might undoubtedly have been saved specially those of the lowest economic strata. To show how unprepared the civil authorities were to deal with the situation I would point out that in one of the proceedings of the District Flood Committee presided over by the Divisional Commissioner it was decided that the B.D.O., Sadar, should have at least twenty country boats under his control which would be immediately available during the floods. When the Karala was in high floods there were no boats available for rescue work near the Karala Bridge near the statue of Netaji Subhas Chandra Bose nor anywhere within a couple of miles. One boat which had been submerged after the immersion ceremony of Goddess Durga on the Dasami day was brought out of water with great difficulty near the site of the Karala Bridge and was washed and used for the rescue of some people but the boat itself gave way and sank in it. I repeat that the floods were of a magnitude which was never taken into calculation in either determining the strength and heights of the embankment.

The Chief Engineer, Irrigation, has pointed out in his note (Annexure C), a copy of which has been forwarded to the Chief Secretary, that during the present floods of the Teesta the estimated flood discharge at Jalpaiguri was 7,00,000 cusecs as against the designed discharge of 5,00,000 cusecs provided at the railway and road bridges at Jalpaiguri. He has also stated that the embankments were overtopped by 3 feet or so over miles together. Nothing really could have prevented the disaster.

My conclusion is that some lives of middle class would have been saved had the public been warned on the morning of 4th October 1968 or during the early afternoon of the same day. Although this would not have prevented any of the damage to property and crops, and loss of cattle, it would have saved probably the lives of many poor people who lived near the river side in hovels consisting of small sheds which do not give them any protection against flood waters like those in houses with compound walls or houses with an upper storey.

Re: Paragraph (4) of Chief Secretary's D.O. No. 7277P., dated the
15th October 1968

Any other matters having a bearing on the above question,

The following matters which I shall now deal with have no direct bearing on the question of working of the flood warning system. Certain matters came to my notice in the course of my investigation both among officials and non-officials. I feel that these matters should be brought to the notice of Government for their consideration.

Firstly, apart from the grievance of the public that they were not taken into confidence sufficiently early regarding the impending floods, they also expressed great resentment because people marooned after the floods without food and water were first given relief by young students of Siliguri town who came with whatever they could get, mostly bread, biscuits, etc., and carried water tanks on trucks to give succour to the people. They said that the local officers and staff were as affected as themselves except those who lived in two-storied houses but why could not officers from Siliguri come to the rescue like the students who on their own initiative did so? I asked the Divisional Commissioner that when he after a great deal of trouble reached Siliguri on the morning of 6th October whether he asked the Sadar Subdivisional Officer, Siliguri, and the Subdivisional Police Officer there to send parties of officers to Jalpaiguri with food, water and relief. His answer was that he did not. He was really busy obtaining military help as aid was required on a massive scale. I also asked him whether any local officials of Siliguri had offered any help on their own initiative. He answered that no one had. As Shri S. K. Banerji as Divisional Commissioner had sufficient jurisdiction over Siliguri to transfer men and officers temporarily to Jalpaiguri or even to operate from Siliguri he would have enhanced the reputation of the officers and not let the public think that the administration was a heartless machine.

The next point that struck me was that the Deputy Commissioner and the Divisional Commissioner had warned the army on both banks of the Teesta sufficiently early to come to the aid of the civil. From the Deputy Commissioner's written statement (Annexure G), dated the 18th October 1968, it appears that he along with the Divisional Commissioner made an aerial reconnaissance by Air Force helicopter at 14.50 hours on 4th October 1968 of the flooded areas of Domohani and Mandalghat and immediately thereafter requested the Army to send rescue boats. Earlier at 7.15 a.m. they had informed the Army at Binaguri, on the east side of the river and not more than an hour and a half's journey from Domohani, by road to send rescue boats to Domohani area. From the Log Book (Annexure F) it appears that at 11.45 a.m. Major Baxi had informed the Control Room that rescue boats had been sent to Domohani. The reconnaissance by Air Force helicopter at 4.30 p.m. must have been due to the aid requisitioned from the army at 11.45 a.m. At 4.35 p.m. after the helicopter flight, Army help was asked for by a message being sent to the Commander, Headquarters, XXXIII Corps, Artillery Brigade, C/o at 99 A.P.O. The Command Headquarters of XXXIII Corps is at Bengdubi, a few miles

from Bagdogra airport. Major Gokhale came to see the Deputy Commissioner at 7.10 p.m. and was to go to Kadobarihat in Mandalghat area for rescue operations. B.D.O., Jalpaiguri, was also to proceed to the same place along with Major Gokhale with dry food for distribution among the flood-affected persons. At 7.45 p.m. Major Gurung from Binaguri arrived at Mainaguri with three boats and began rescue operations in Barnes area. Twelve more Army boats were apparently sent out of which eight were to be sent to Domohani and four were to work in Barnes area.

Shri Chikur Chanda, M.L.C., who is also the President of the Mainaguri Anchalik Parishad, giving his evidence before me said that the embankment at Domohani had collapsed on 5th October at 1.15 a.m. and that Army had not reached with more boats or with men to repair the bundh even then. From the Control Room Log Book it is seen that at 1.50 a.m. the Deputy Commissioner was informed by Officer-in-Charge, Mainaguri, that 70 Army men had reported to him and they had been sent to Domohani for necessary rescue operation. Again from the Control Room Log Book it is seen that at 3.40 a.m. on the 5th October, the Corps Commander at Sukhna was contacted and asked to take over rescue operations as the magnitude of the task was beyond the control of the civil authorities.

From all the above it appears that the Army were alerted fairly early in both banks of the river but what with reconnaissance flights and collection of boats and vehicles, so much time expired that very little could be done to repair the weak portions of the embankment or to rescue marooned people. The dependence on the Army Units who were not too far away from either Domohani or Jalpaiguri being well within one and a half to two hours' reach by motor transport, had given rise to great hopes in the minds of the administration. Shri Chikur Chanda told me that when in the morning an Army officer from Binaguri had come for reconnaissance he asked Shri Chanda how was it possible for the military to row the boats in the face of such strong current. Shri Chanda replied as follows:—

“I cannot tell you but we have great faith in the Jawans. They can do wonderful things.”

I must say, however, that Shri Chanda did not wait for the Army to appear but organised local volunteers for rescue work and for repairing seepage points and rescued a large number of persons and warned others, resulting in the saving of many lives. He was without food working at the embankments from early morning till midnight and only left the embankment when it gave way and flood waters rushed in. He himself was swept away but caught hold of a house and saved himself.

I think Government may consider having an investigation made jointly by a high-powered Army officer and a civil official to ascertain the reason for the delay in the giving of aid by the Army. From the Jalpaiguri officials I found that the Army had not many boats ready, and took hours to collect them. When they came to Jalpaiguri town with their water tanks these tanks were only one or two and very small in size. The local police and the Unit at Siliguri of the Mobile Civil Emergency Force rendered very good service (Annexure J) and

Government might consider whether these Units should be expanded with more vehicles so that instead of relying on the Army at every step, the first rush of help would be given by men of these Units.

I had discussed with the Superintending Engineer, Irrigation, at Jalpaiguri the question of siltation of the bed of the river Teesta during each flood season. I gathered from him that every year about two to three inches of silt was deposited on the bed of the river down stream near Jalpaiguri but often the silt was again washed away by the next season's flood water. I then mentioned that considering how much silt is seen deposited near the embankment after each flood season it appeared to me that the height of the protection bundh required raising after every two or three years. Later I interviewed Shri B. C. Ghose, a leading citizen and Planter, who was responsible for starting the Polytechnic at Jalpaiguri and for later succeeding in converting it into a full-fledged Engineering College, affiliated to the North Bengal University. I discussed the same point with Shri B. C. Ghose and he told me that he had seen that year after year during the flood season the level of water in the Teesta was getting closer to the top of the Paharpur-Randhamali embankment. He was a member of the North Bengal Flood Control Advisory Committee which, much to his regret, never met after its last meeting on 8th November 1966. From 1962 onwards he had been writing numerous letters and putting forth suggestions for protection work of the embankment near Randhamali. The Superintending Engineer subsequently told me that the scheme was sanctioned for constructing a spur near Paharpur side and boulders had been collected. By that time the Guide Bundh of the railway bridge had been started and Government were of the opinion that by construction of the guide bundhs of the railway on both sides the need for the spur for the protection of the Paharpur-Randhamali embankment had disappeared. However, the boulders were kept at site for three years and when the Paharpur bundh was not affected by subsequent floods it was decided to utilise these boulders for construction elsewhere. I quote below the first paragraph of an urgent and immediate letter, dated the 26th December 1962 written by Shri B. C. Ghose to the Deputy Commissioner, Jalpaiguri:—

"If you kindly take the trouble to go to Randhamali near Raipur Tea Estate by pitched P.W.D. road up to the junction of the protection work and the road, you will find how serious is the position there. During the last floods the Teesta has hugged the outer side of the earthen embankment. The Irrigation Department somehow or other protected the *immediate* securing of the earthen embankment by giving some temporary sausages. A look in the locality would convince that the gradient of the country is such that if the Teesta river scours the embankment, which it is likely to do in the forthcoming rains, the whole of the Teesta river will come in the roadside and fall in the Karala, destroying the town completely."

It seems that the statement made in the above letter was almost prophetic since, whatever the reason, Jalpaiguri, has been destroyed by Teesta flowing through

the Karala through the breach in the embankment near Paharpur after first overtopping. True that before the river could do so only after it had first destroyed the railway guide bundh.

During many years of my service career I had experience that whenever new railway lines are built or new roads are constructed across the line of flow of water, usually north to south in North Bengal, insufficient outlet and openings are left. Later, after there are breaches in the embankment then only more culverts and more openings are provided. In the case of the railway bridge at Jalpaiguri also, the attempt to confine the Teesta river to a net opening of less than 2,500 feet at the railway bridge seems to have been frustrated by the experience of the present flood. This time nearly a hundred acres of forest land has been washed away between the Coronation Bridge and Jalpaiguri town. Big logs, in fact whole trees, having been brought down by the river must have obstructed the opening under the bridge with the result that the level of water rose higher and overtopped the embankment. This is borne out by the fact that a considerable portion of the logs and trees are found piled up inside the town of Jalpaiguri.

Even as a young District Officer in Bogra, now in East Pakistan, I had objected to insufficient openings on the railway culverts but these objections were brushed aside as coming from a non-technical person. I myself had the bitter experience of having to deal with flood and epidemic the very next year when the railway embankment was breached.

I suggest that this aspect of the problem, namely, not providing adequate opening in embankments made for railways and roads be considered by the Central Water and Power Commission. My feeling is that the designs are made much too economical to keep the project cost on the low side but later many times the savings effected have to be doled out for relief and for reconstruction on top of the misery caused to human beings.

Should any sort of enquiry at a higher level be instituted by Government, I suggest that Shri B. C. Ghose who has kept an excellent record on the subject of floods in Jalpaiguri be called to give evidence. These records were kept so safely that they have not been affected by flood water which entered his house.

S. N. RAY.

25-10-1968.

ANNEXURE A

TEESTA BAZAR (ANDERSON BRIDGE)

(i) Deputy Commissioner, Jalpaiguri .. .	Over phone.
(ii) Executive Engineer, Jalpaiguri Irrigation Division ..	
(iii) Superintending Engineer, North Bengal Circle ..	
(iv) Superintendent of Police, Jalpaiguri ..	
(v) Deputy Chief Enginoor, P. W. D., Jalpaiguri ..	
(vi) Commissioner, Jalpaiguri Division, Siliguri ..	
(vii) Deputy Commissioner, Cooch Behar .. .	By radiogram.
(viii) Subdivisional Officer (Civil), Mekliganj ..	
(ix) Wireless Operator, Malhati Tea Estate, who will transmit the message to the Rescue Officer, Malhati and the Block Development Officer, Mal Bazar.	
(x) Superintendent of Police, Cooch Behar .. .	
(xi) Chief Engineer, N. F. Railway, Pandu ..	
(xii) Chief Engineer, P. W. D. Calcutta .. .	
(xiii) Chief Engineer, (East), I. and W. Directorate .. .	Through O. C., Kotwali police-station and O. C., Mainaguri police-station.
(xiv) Secretary, I. and W. Department, Calcutta ..	
(xv) Subdivisional Officer, Irrigation Subdivision, Mainaguri ..	
(xvi) Block Development Officer, Mainaguri .. .	
(xvii) S. D. O., Siliguri, Irrigation Subdivision .. .	By radiogram.
(xviii) District Engineer, N. F. Railway, Siliguri ..	

ANNEXURE B

DOMOHANI

- | | |
|---|----------------|
| (i) Deputy Commissioner, Jalpaiguri | Over
phone. |
| (ii) Executive Engineer, Jalpaiguri Irrigation Division,
Jalpaiguri. | |
| (iii) Superintending Engineer, North Bengal Circle,
Jalpaiguri. | |
| (iv) Superintendent of Police, Jalpaiguri | |
| (v) Deputy Chief Engineer, P. W. D., Jalpaiguri .. | Radiogram. |
| (vi) Commissioner, Jalpaiguri Division, Siliguri .. | |
| (vii) Subdivisional Officer (Civil), Mekliganj | |
| (viii) Deputy Commissioner, Cooch Behar | |
| (ix) Superintendent of Police, Cooch Behar | |
| (x) Chief Engineer, N. F. Railway, Pandu | |
| (xi) Chief Engineer, P. W. D., Calcutta | |
| (xii) Chief Engineer (East), Irrigation and Waterways
Directorate, Calcutta. | |
| (xiii) Secretary, Irrigation and Waterways Department,
Calcutta. | Radiogram. |
| (xiv) District Engineer, N. F. Railway, Siliguri .. | |

ANNEXURE C

JALPAIGURI (KING'S GHAT)

(i) Commissioner, Jalpaiguri Division, Siliguri ..	By radiogram.
(ii) Deputy Commissioner, Cooch Behar ..	
(iii) Superintendent of Police, Cooch Behar ..	
(iv) Subdivisional Officer (Civil), Mokliganj ..	
(v) Chief Engineer, N. F. Railway, Pandu ..	
(vi) Chief Engineer, P. W. D., Calcutta ..	
(vii) Chief Engineer (East), Irrigation and Waterways Directorate.	
(viii) Secretary, Irrigation and Waterways Department, Calcutta.	
(ix) Officer-in-Charge, Mainaguri police-station through Officer-in-Charge, Kotwali police-station, Jalpaiguri.	
(x) District Engineer, N. F. Railway, Siliguri ..	

ANNEXURE D

Warning Messages received at Jalpaiguri between 3rd October, 1968 and the early hours of the 5th October, 1968 regarding the water-level of the River Teesta and the actions taken thereon.

A. WARNING MESSAGES

1. The first message was received from Officer-in-charge, Kalimpong police-station, Darjeeling, on 3rd October, 1968 at 20.35 hours communicating the rise in the water-level at Teesta Bridge (Anderson Bridge) point. The message did not contain any further information beyond that the Gauge reading crossed 674.00. The above reading was taken at 18.30 hours of the same date.

2. Another message from the Officer-in-charge, Kalimpong police-station was received by me on 4th October, 1968 at 08.49 hours. From that message it appeared that at 12.00 hours on 3rd October, 1968 the reading at the same point was 665.50; at 18.00 hours 665.00 and at 00.01 hours on 4th October, 1968 it read 674.50. At 06.00 hours of 4th October, 1968 the reading was 678.00.

3. From the above readings it would appear that before 00.01 hours of 4th October, 1968 the water-level at the Teesta Bridge point dropped from 674.00 to 665.00. The water-level started rising from 06.00 hours on 4th October, 1968.

4. On 4th October, 1968 at 08.58 hours a message was received from Subdivisional Officer (Irrigation), Mainaguri, that Teesta at Domohani crossed extreme danger level at 00.30 hours and was rising slowly. It was further stated in the same message that the water-level of the River Teesta at Domohani was above extreme danger point at 03.30 hours on 4th October, 1968 and was rising slowly.

5. In the morning of 4th October, 1968 a message was received from Subdivisional Officer, Jalpaiguri Irrigation Subdivision (Memo. No. 984/1, dated 4th October, 1968) that the River Teesta at King's Ghat at Jalpaiguri crossed danger level at 02.00 hours and the water-level was rising slowly. On the same day another message [Memo. No. 985(3), dated 4th October, 1968] was received from the same source that the River Teesta at King's Ghat recorded a water-level of 266.40 at 6.00 hours on 4th October, 1968.

6. On 4th October, 1968 a message was received from Officer-in-charge, Kalimpong police-station, at 07.25 hours communicating that at Teesta Bridge point the water crossed warning level at 05.30 hours on the same day and was rising rapidly. On the same date at 08.21 hours another message was received from Officer-in-charge, Kalimpong police-station, that the Teesta crossed extreme warning stage level at 07.30 hours and was rising rapidly.

7. On 4th October, 1968 a message was received from Subdivisional Officer, Irrigation, Mainaguri, at 11.20 hours, communicating that the water-level of Teesta at Domohani was 2 feet above extreme danger level at 09.10 hours on the same date and was rising slowly.

8. From the perusal of the above readings it would appear that the last message received from Officer-in-charge, Kalimpong police-station, related to the water-level as it stood at 07.30 hours on the same date. The said message conveyed the information that the River Teesta at Teesta Bridge point crossed extreme warning stage level. At 09.10 hours on the same day the water-level at Domohani was 2 feet above extreme danger level as it would appear from the message of Subdivisional Officer, Irrigation, Mainaguri. The likely consequences of this warning concerning the Domohani were not reflected in the warning messages received from the Irrigation officials regarding King's Ghat. In fact there was no mention in either of these two messages received from Subdivisional Officer, Irrigation, Jalpaiguri Subdivision, that the water-level of Teesta at King's Ghat exceeded extreme danger level. The message sent in Memo. No. 985(3), dated 4th October, 1968 did not give any indication whatsoever as to whether the water-level of Teesta at King's Ghat was rising slowly or rapidly although the material time of this message was later than the other one concerning the same King's Ghat point.

9. Domohani is flanked by Irrigation Department embankments and maintained by them. Apart from sending a message that the water-level at Domohani exceeded the extreme danger point at 09.10 hours on 4th October, 1968, the local Irrigation Department officials did not convey to me either through written messages or over Telephone their apprehension of a threat to the embankments at Domohani or below it. It is now gathered that the Superintending Engineer and Executive Engineer, Irrigation, Jalpaiguri, visited the Domohani embankment at about 20.00 hours and tried to enlist local help for preventing breaches on the embankments and further that the local people expressed their inability to render any help at that hour when excessive and continuous rainfall was lashing the area. The point therefore is that the Irrigation Department officials although aware from the early hours of the 4th October, 1968 of the river Teesta having crossed the extreme danger level did not give any warning to me about any threat to the embankments at Domohani or down below.

10. So far as Jalpaiguri Town is concerned, the Gauge reading at King's Ghat is no doubt material but the two messages received by me from Subdivisional Officer, Irrigation, Jalpaiguri Subdivision, failed to give an inkling about the water-level and the rate of its rise. The local Irrigation officials did not inform the Control Room anything either in writing or over Phone about any possible danger to Jalpaiguri Town either because of the river having exceeded the danger level at Domohani or threat of breaches on the the embankments in between Domohani and Jalpaiguri Town or the wafer of the river over-topping the embankments.

B. PREVENTIVE ACTIONS TAKEN

11. A Control Room was set up in Deputy Commissioner's Bungalow office (Phone Jalpaiguri-34) on 4th October, 1968 and it started functioning round-the-clock at 07.45 hours soon after the receipt of the first message from Officer-in-charge, Kalimpong police-station. Taking experiences of similar warning messages of the last year as a guide that places like Mondalghat, Boalmari and Nandanpur in lower reaches get flooded by rise of water in the upper reaches, I alerted the local Police, Mobile Civil Emergency Force and local officials to start rescue operations and to forewarn the people. The Log Book maintained at the Control Room will show the measures taken at different stages including requisition of full Army assistance at 16.15 hours on 4th October, 1968. The Commissioner, Jalpaiguri Division, and myself meanwhile made an aerial reconnaissance by the Air Force Helicopter at 14.15 hours on 4th October, 1968 of the flooded areas like Domohani and Mondalghat. The Army was also requested to send rescue boats.

12. From the Log Book it will appear that Executive Engineer, Irrigation Division, Jalpaiguri, sent telephonic message at 00.15 hours on 5th October, 1968, asking for a vehicle urgently to go to Paharpur embankment with some repairing material. The Executive Engineer was advised to take one vehicle from those stationed at the Kotwali police-station for emergent use. I was not kept subsequently informed as to the situation in Paharpur embankment. At 00.01 hour, Superintending Engineer, Jalpaiguri, sent a telephonic message that the meter gauge line between Domohani and Lataguri had been over-flooded and the water-level at Domohani was 3.7 feet above extreme danger level at 12 midnight. At 03.45 hours Executive Engineer, Irrigation, Jalpaiguri reported over phone that a breach in the Teesta embankment near Railway bundh had occurred and the flood water was entering the River Karala and flooding the Jalpaiguri Town.

13. From the above development of the situation it will be seen that measures like forewarning the people and evacuating them were taken, acting upon the warning message relating to Domohani area. But so far as Jalpaiguri Town is concerned it was not possible to forewarn the Town people as no information was received from the Executive Engineer, Irrigation, Jalpaiguri, whether or not the embankment at any point was in danger of being breached. The last message received from the same officer at 03.45 hours was too late as I found Jalpaiguri Town suddenly gripped by heavy flood which came almost simultaneously at the time when the message was received.

14. The Power Supply of the Jalpaiguri Town went off at about 03.10 hours on 5th October, 1968. Before the receipt of the message of the Executive Engineer, Irrigation, Jalpaiguri, at 03.45 hours, I had no information that the Teesta embankment was in danger of being breached. I realised the danger only at 03.45 hours in receipt of the above message. It was then raining very heavily and continuously accompanied by hard gale. The only impression that one could have had

before 03.45 hours on 5th October, 1968 was that Jalpaiguri Town was being inundated by the rise in the River Karala which was a normal phenomenon of every year with heavy rainfall.

15. With the heavy flood waters already in the town at 03.45 hours on 5th October, 1968 and its full fury hitting the town from 04.10 hours, it was physically not possible considering the complete lack of resources to organise any system of forewarning the people. The calamity came with such a suddenness in the early hours of 5th October, 1968 that all were taken by surprise and in a few minutes the flood water rose to 12 feet at some places in the town. The terrific suddenness of the calamity can be illustrated by the fact that Shri S. K. Bhattacharjee, w.b.j.c.s., who was manning the Control Room could not reach home the same night as he found himself marooned by the sudden onrush of flood water and had to take shelter on the embankment till the flood water subsided.

C. WARNING SYSTEM

16. The existing warning system without any indication of whether the River waters exceeding the danger level or extreme danger level is attended with any threat to the embankment and if so at what point or points specially the location of weaker ones does not seem to be a useful one. The arrangements of the Irrigation and Waterways Directorate regarding exercise of constant vigil over the weaker points of the embankment and materials readily available for emergent restoration without any loss of time are not known to me. That there were no such arrangements to plug the bores detected would be evident from the experience the Irrigation officials have had at Domohani on the night of 4th/5th October, 1968. Stock-piles of sandbags and other piling materials were not there. Arrangements for Gauge reading between shorter distances would enable the Irrigation and Waterways Directorate officials to be reasonably prepared with advance information regarding the probable consequence in the lower reaches of a rise in the water-level in upper reaches.

S. P. MALLIK,
Deputy Commissioner, Jalpaiguri.
18-10-1968.

ANNEXURE E

Notes on some relevant points in connection with flood havoc caused by the river Teesta during October, 1968

1. Over and above the "flood warnings" issued by the I. and W. staff from the Flood Warning Stations at Teesta Bazar, Domohani and Jalpaiguri King's ghat, I informed the Deputy Commissioner, Jalpaiguri, over phone round about Zero hour on 5-10-68 that all the flood embankments along both banks of the river Teesta had become quite unsafe as the water level already attained was much higher than that for which each of the embankments had been designed. I also requested the Deputy Commissioner, Jalpaiguri, to keep himself awake throughout the night as very serious situations might be met with.

After a few minutes, the S.D.O., Jalpaiguri Irrigation Subdivision, informed me that seepage through the Jalpaiguri embankment at immediate upstream of the Railway embankment crossing was threatening the safety of the embankment. As the vehicle (Station Wagon of Superintending Engineer, North Bengal Circle) that was being used by the S.D.O., Irrigation, Jalpaiguri, for patrolling over the Jalpaiguri embankment had gone out of order on the crest of the embankment, he came to Jalpaiguri in a vehicle of Assistant Engineer, Teesta Bridge (P.W.D.) to report the matter. Almost immediately Shri Arun Ganguly, Superintending Engineer, P.W.D., rang me up and stated that he had been informed that the I. and W.D. staff was facing some troubles at the Jalpaiguri embankment immediate upstream of the Railway embankment crossing. He informed me also that he already had a discussion with D.C., Jalpaiguri, on this issue when the D.C. intimated him that Military help might be available for the purpose if requested by the I. and W. Department. At that time I requested Shri Ganguly for providing a vehicle for the use of S.D.O., Jalpaiguri Irrigation Subdivision, but he said that no vehicle could be made available. Immediately after my telephonic conversation with Shri Ganguly, I rang up the D.C., Jalpaiguri, and the telephone was probably attended by one Mr. Mukherjee, whom I requested to supply me with Military help for maintenance of Jalpaiguri embankment at the seepage-point and also for arranging a vehicle for use by S.D.O., Irrigation, Jalpaiguri. I was then informed that no Military help could be made available for the purpose. Mr. Mukherjee, however, arranged a vehicle of the Jalpaiguri Police Station. But when the S.D.O., Irrigation, Jalpaiguri, contacted the O.C., Jalpaiguri P.S., for the vehicle, he was told that no vehicle could move at that time due to considerable depth of accumulated rain water and hence the vehicle could not be sent.

2. On 4-10-68, the Domohani embankment was inspected by me in between 9 a.m. and 10 a.m. At that time the water level was about 2 feet above Extreme Danger Level at Domohani gauge. Some seepage zones

were then observed and measures at these zones to protect the embankment were in progress. From Domohani I went to the office of S.D.O., Maynaguri Irrigation Subdivision, at Maynaguri and thereafter I went via Oodlabari to Sidhabari-Chengmari embankment on the left bank of the river Teesta. At Sidhabari-Chengmari embankment also the river level was found considerably above the designed level for which the embankment was constructed. The countryside slope of this embankment was found to have subsided at places. Possible measures were already in progress and the local officers were instructed to take all possible measures and to watch the embankment closely.

After my return at Jalpaiguri, I again went to Domohani embankment with the Superintending Engineer, North Bengal Circle, at about 20-30 hours. The water level at that time was more than 1.5 feet above the Extreme Danger Level at Domohani gauging. It was observed that the countryside slope of the embankment had subsided seriously at places. More subsidence was apprehended resulting in breaches to the embankment in spite of all possible attempts to avert the breaches in the prevailing cyclonic weather. Shri Chikur Kumar Chanda, M.I.C., and some other people of Domohani township were found on the embankment. They were informed by me that due to subsidence of the slope, the embankment might breach. Shri Chanda was requested by me to supply working hands so that the maintenance of the embankment and patrolling thereon might be done with the help of those people in addition to the departmental staff. He was also requested to kindly caution the people regarding the extremely serious situation. After return to Maynaguri I was informed over phone by Shri Chanda that nobody could be persuaded by him to go out in the cyclonic weather. From Maynaguri I rang up Maynaguri Police Station when the 2nd Officer of the said P.S. responded to my call. The O.C. of the P.S. was stated to be in the Barnes area. I requested the said officer to immediately despatch an urgent flood message which was being sent by a Special Messenger. A copy of the message is enclosed herewith. This message contained that the Domohani and the Sidhabari-Chengmari embankments might be breached and people should be cautioned accordingly. After return to Jalpaiguri at about 22-30 hours. I contacted the D.C., Jalpaiguri, over phone when he informed me that he had arranged for Military help for both rescue operation and maintenance of the embankment.

3. In this connection, it may be stated that embankments on both banks of the river Teesta were breached after the river water overtopped the crests of the embankments by considerable depths. No embankment was breached before it was overtopped.

K. P. Choudhury,
Executive Engineer,
Jalpaiguri Irrigation Division.

18-10-68.

Submitted to Shri S. N. Roy, I.C.S. (Retd.), Enquiry Officer. This note on some relevant points has been prepared as desired by him.

K. P. Choudhury,
Executive Engineer,
Jalpaiguri Irrigation Division.

18-10-68.

Message to be transmitted

ABNORMAL HIGH FLOOD IN RIVER TEESTA AND CYCLONIC WEATHER IS CONTINUING SINCE 3-10-68 (.) THE COUNTRY-SIDE SLOPES OF SIDHABARI-CHENGMARI EMBANKMENT IN P.S. MAL AND DOMOHANI EMBANKMENT IN P.S. MAYNAGURI OF JALPAIGURI DISTRICT HAVE SUBSIDED AT PLACES (.) MORE SUBSIDENCE APPREHENDED WHICH MAY ULTIMATELY RESULT IN BREACHES IN SPITE OF ALL POSSIBLE ATTEMPTS (.) PEOPLE MAY BE CAUTIONED ACCORDINGLY (.)

Sd. K. P. Choudhury,

4-10-68.

From :—

E.E., Jalpaiguri
Irrigation Division
Camp—Maynaguri.

Flood Emergency

From :—

Executive Engineer,
Jalpaiguri Irrigation Division,
Camp office at Maynaguri.

To

The Officer-in-Charge,
Maynaguri Police Station, Maynaguri.

Subject: Flood Message.

The enclosed flood message may please be communicated through R.T. to the following addresses immediately :—

- (1) Chief Engineer (East), I. and W. D., Writers' Buildings, Calcutta-1.
- (2) Deputy Commissioner, Jalpaiguri.
- (3) Superintending Engineer, P.W.D., Jalpaiguri.
- (4) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (5) District Engineer, Jalpaiguri.
- (6) Superintending Engineer, N. F. Railway, Siliguri.
- (7) Superintending Engineer, I. and W. D., North Bengal Circle, Jalpaiguri.

Sd. K. P. Choudhury,
Executive Engineer,
Jalpaiguri Irrigation Division.

4-10-68.

COPY

ANNEXURE "F"**FLOOD CONTROL ROOM LOG BOOK****4-10-68**

4-10-68.
07.15 a.m.

Testa Bridge Gauge crossed extreme warning stage level (683.00) at 07.30 hrs.

It is likely to reach Jalpaiguri at 15.00 hrs.
All concerned warned.

(1) **Mandalghat**—Approximately 4,000 people affected. Report of 5 persons washed away. Two Irrigation boats sent and rescue operation being organized by M.C.E.F., local Police and B.D.O. Dry food is being arranged. Rescue shelter—Rice Mill, schools. Army informed by Radiogram and phone to send rescue boats immediately. Commissioner informed of the latest position.

(2) **Domohoni**—Rescue operations going on by the local Police. Seven boats are operating. Army (Binnaguri) informed to send rescue boats. Ex. Engineer, Irrigation asked for more boats at Domohoni. S.D.O.(S) proceeding to Domohoni. Report of a few heads of cattle washed away. C.M.O.A. requested to send a mobile medical unit to Mondolghat, if possible, otherwise to Kaori.

11-45 a.m.

Major Baxi of Binnaguri informs that rescue boats are being sent to Domohoni. O/C Mng. P.S. is asked to divert some army boats to Mandalghat area through O/C, Kotwali P.S.

12-30 p.m.

O/C, Kotwali P.S. reports—

137 flood-affected people from Pilkhana have taken shelter near Irrigation quarters at Race Course. Children are going without food. MCEF have been requested to distribute chira and gur which are being sent. Nazir is sending 50 kgs. of chira and 10 kgs. of gur. These will be handed over to Shri Maiti of MCEF for distribution.

12-35 p.m.

O/Cs of Mal and Dhupguri Police Stations are asked to send reports to this Control Room from time to time.

- 12-45 p.m. Information is received from B.D.O., Dhupguri that the Diana and Gilandi are in spate. Nathua and other areas are affected. AEO, Dhupguri BDO office sent to Nathua to make necessary arrangements of relief.
- 1-30 p.m. SDO, APD is requested to send flood reports to this Control Room from time to time.
- 3-00 p.m. Water still rising at Mandalghat and Balabari Anchal. Proper Mandalghat is not off from vehicular traffic. Railway bridge near Mandalghat Rly. Station has been breached. 400 families are still marooned. Rescue necessary. No boat is locally available. No way to reach relief to Mandalghat proper.
- 3-15 p.m. BDO, Rajganj reports that about 150 people are marooned in char at Dakimari and Salmara in Mantadari Anchal. They are living on "machans". Small local boats are practically useless for rescue work. Large boats necessary.
- 4-30 p.m. BDO, Haldibari requests for sending rescue boats immediately to Ramen Majumdar's house at Madhya Kashia-bari. Water level rising alarmingly. People need to be rescued.
- 4-30 p.m. Reconnaissance by helicopter over Mandalghat and Domohoni by Commissioner and myself from 2-15 p.m.
- 4-35 p.m. Army help has been called for to cope with devastating floods in Mandalghat and Domohoni. Message sent to the Commander HQ 33 Corps Artillery Brigade, C/O 99 A.P.O. The message has been given to Capt. Jadav over phone.
- 4-55 p.m. Report of loss of two lives at Mandalghat is confirmed by BDO, Sadar.
- 5-20 p.m. BDO, Mainaguri, reports that Domohoni, Barnesh, Dharampur and Pedamati in Mainaguri Block have been affected. 10 square miles involving 2,000 people affected. One man at Barnesh has been washed away. 10 to 15 heads of cattle have been washed away.
- 5-45 p.m. CMOH requested to depute a mobile medical unit to Domohoni area. One unit is already operating at Kodobari-hat near Mandalghat.
- 6-15 p.m. S.D.O. reported after inspecting Domohoni and Barnesh that large number of persons are still marooned in char islands near Barnesh and low-lying area of Puranganj Matiali of Mal. Army boats began their rescue operations at about 5 p.m. There has been many loss of cattle due to washing away. Arrangement for shelter and dry food has been made.

- 6-30 p.m.** Message received from BDO, MNG. He wanted new boats for rescue operation in Dharampur area. He has been asked to contact O/C, MNG P.S.
- 7-10 p.m.** Major Gokhale came to the D.C. Major Gokhale is proceeding to Kadobarihat to-night with his men and equipments for rescue operations in Mandalghat area. They will also set up a temporary Hq. in Gopalpur House at Jalpaiguri. B.D.O., Jalpaiguri also proceeding to Kadobarihat along with Major Gokhale with dry food for distribution among the flood-affected persons.
- 7-15 p.m.** Received radiogram from the O/C, MNG P.S. This is as follows:
- Due to excessive rain there has been flood on Teesta river on 3/4-10-68. Barnesh char, Ulladbri char, Domohoni char, Baragharia Sisubari and adjacent villages have been affected. Rescue work by Police and local flood committee are being continued. Information of some cattle being taken away by the flood as so far been collected but there has been no information of loss of life. Local B.D.O., S.D.O., Sadar, have been informed. C.I. with O/C and all available staff are moving in the area.
- 7-45 p.m.** O/C, Kotwali P.S., gives the following message conveyed by the C.I., Mainaguri, to the D.C., Jalpaiguri.
- In continuation of previous message in connection with the flood situation the Army under charge of Maj. Gurung has arrived with 3 boats and is now in operation in rescue work in Barnesh area. Capacity being 11 persons per boat. Requisition for 12 more army boats has been sent and as soon as they arrive 4 will work in Barnesh area and 8 would be sent to Domohoni area. Country boats cannot work in high current now. People in several villages have been marooned. One female dead body was seen taken away by the current. Cattle in number are being seen taken away by the current. Further report will follow.
- 8-05 p.m.** Message from S.D.O., Irrigation, Mainaguri, runs as follows:
- Teesta at Domohoni gauge 1.6 feet above extreme Danger level at 18.30 hrs. on 4-10-68 and falling slowly.
- 8.40 p.m.** Shri H. G. Bhattacharjee of the MCDF informs over phone the following message:
- (1) No more people left on house top at Phandiatpara. Six people from house top at Phandiatpara have been rescued,

- (2) Willing people from Jaliapara rescued.
- (3) Water spreading over more areas.
- (4) Pucca road about 1 km. is under water from Kadobari wooden bridge.
- (5) Railway embankment opposite Kadobarihat is being eroded and water sipping through scours of the railway embankment.
- (6) 10 sq. miles affected and 4,000 to 5,000 people affected.
- (7) Loss to two lives confirmed. Loss of 4 or 5 more lives feared. Large number of cattle lost.

9-15 p.m. Message received from Domohoni about the threat to the embankment at Domohoni. Major Bakshi has been asked over phone to rush army to help the Irrigation Dept. to stop breaching the embankment.

10-25 p.m. O/C, Control Room, at Kotwali P.S., informs over phone that he has been informed by the Asst. Manager of Raipur T.E. that the people of Rangdhamali Teesta Bank are affected by the floods and they have been taking shelter in Raipur tea garden.

10-30 p.m. Ex. Engineer, Irrigation, informs that the Teesta water level is 2.5 feet above extreme danger level at 22 hrs. at Domohoni on 4-10-68. He further informs that the Chengmari-Sitabari embankment is threatened. He has been told that army men would be reaching there immediately and he has been asked to contact the army men to repair the breaches in the embankment.

10-40 p.m. Informed MNG 55 about the threat to Domohoni embankment and has been asked to make the people of the township alert. There has been a breach in the embankment at about $\frac{1}{2}$ mile up in the Teesta from Domohoni.

11-10 p.m. Ex-Engineer informs that the water level of the Teesta is 3.2 feet above extreme danger level at 11 p.m. today at Domohoni.

11-20 p.m. The O/C, MNG PS, was informed about the coming of the army men to Domohoni and was asked to guide them to Domohoni whenever they report to him.

11-30 p.m. O/C, MNG PS, informs that the army men have not yet reported. The three boats could not work in the rescue operation in the night due to gusty wind.

- 11-40 p.m. The Asst. Manager, Rajpur T.E., informs that the water of Teesta has entered into the tea garden and have inundated two lives of the labourers of the garden. The labourers are being removed to safer places. The water spilling over the bundh of the tea garden and the position of the bundh is serious.
- 5-10-68**
- 12-15 a.m. Executive Engineer, Irrigation Division, informs that flood water has caused a bore in the bundh at Paharpur. He thinks that it is necessary to plug the bore at once. He was asking for a vehicle as the jeep with him became out of order. He was advised to take the jeep from Kotwali P.S. for the present.
- 1.00 a.m. Extension Officer (Ind.) informs from Domohoni that the bundh at Domohoni is badly in danger. He informs that army has not yet reached there for protection operation.
- 1.00 a.m. S.E., Irrigation reports that—
- Meter gauge railway line between Domohoni and Lata-guri has been over-flooded. Water level at Domohoni was 3-7 ft. as at 12.00 midnight above extreme danger level, he says.
- 1.50 a.m. O.C., Mainaguri, informs that 70 army people just reported to him. He says that the army men have been sent to Domohoni for necessary protection operation.
- 1.55 a.m. E.E.(I) and Shri Chikur Chanda, MLC, inform that the embankment at Domohoni gave way. It was further informed that Army was yet to report there. Warning for evacuation was issued to the villagers, they told.
- 2.00 a.m. Kotwali P.S. informs that Teesta level at Domohoni reached 3.76 ft. above extreme danger level as at 00.15 hrs. Level still rising.
- 2.05 a.m. O.C., Mainaguri, was contacted over phone. He was asked to remove the flood-stricken people at Domohoni to safer places.
- 2.10 a.m. O.C., Mainaguri, and the people at Domohoni were apprised of the danger. They were asked to warn both Mainaguri and Domohoni townsmen of the immediate danger and instruct them to evacuate to safer places.
- 3.00 a.m. Message from Asst. Engineer, Irrigation, Mainaguri— Entire Domohoni embankment has been overtopped. It is 5.06 feet above extreme danger level last recorded at 02.00 hrs. Domohoni township including Mainaguri township in danger.

- 3.10 a.m. Electricity off. Power House inundated.
- 3.40 a.m. Corps Commander at Sukhna was contacted and apprised of the grave and alarming situation in both Jalpaiguri town and outlying areas. As the magnitude of the task was beyond our control, the Commander was requested to take over the rescue operation and deploy his Army to tackle the situation.
- 3.45 a.m. Executive Engineer, Irrigation, reports that there has been a breach in the Teesta main embankment near railway bundh. As a result flood water is entering into Karala and flooding the town.
- 4.00 Commissioner informed of the latest position. It was becoming hopeless. O/C's Control Room left for their houses due to sudden danger.
- 4.30 a.m. Full fury of the flood. Waist-deep water inside my chamber. Cattle of the outhouse removed to the verandah of the first floor and inmates to another room. Telephone cut off.
- 4.45 a.m. Sky-rending cries of people from all around in the town. Town plunged in darkness.
5.30 a.m.
- 5.30 a.m. A breach in the Karala bundh (west side) noticed near the bridge. It was a vast sheet of water from Karala to my compound. Teesta was in full fury. Remnants of villages are found adrift in the Teesta.
- 6.45 a.m. Water was found subsiding. Water brought with it heavy silt. Brown desolation all around. Unprecedented havoc brought by the turbulent Teesta.
- 7.45 a.m. Connection with outside world completely cut off. The weather was seen clearing up. No notice of the Army yet on whom we were depending so much. Pity indeed!

ANNEXURE C**GOVERNMENT OF WEST BENGAL****Irrigation and Waterways Directorate**

Memo. No. , dated 14th October 1968.

From—Shri R. B. Chakravarty, B.A., M.I.E., F.A.S.C.E., F.N.I., Chief Engineer (General),

To—The Secretary, I. & W. Department.

Sir,

Under instructions of the Union Minister, I. & P., myself and Shri B. Maitra (Chief Engineer, West and Director, River Research Institute) went to North Bengal on the 10th instant. Before showing the Minister round the flood-affected area and flood damages by helicopter on 11th, we inspected Jalpaiguri town and other flooded areas as also the road and railway bridges at Sevoke and Jalpaiguri by road.

During our movements and talks with local people we found that there was misunderstanding about flood warning messages (particularly the important warning from Teesta Bazar), having not been issued by the staff of the Irrigation and Waterways Directorate in time. We found that there was considerable tension amongst a section of the public on this account.

An immediate clarification of the position is accordingly necessary as it has otherwise become difficult for the Irrigation and Waterways staff to undertake immediate repair works with confidence and with the co-operation of the local people. That the Teesta Flood of October 1968 was of an unprecedented magnitude will be appreciated from the fact of the collapse of the Anderson Bridge, which safely accommodated all the high floods during the last 35 years or so. The flood-levels this year rose above deck of the high bridge when the designed flood-level was not to go higher above the bottom, i.e., the springing of the arches. Also at Sevoke the water flooded several feet deep over the deck of the railway bridge (reconstructed with increased spares after some spares were washed away during 1950 floods) and washed away the end spares.

The estimated flood discharge at Jalpaiguri is 700000 cusecs as indicated by the Union Irrigation Minister, against the design discharge of 500000 cusecs provided at the railway and road bridges at Jalpaiguri. Naturally the bridges could not accommodate all the 700000 cusecs and the flood swelled up much above the designed maximum water-level. The free boards in the embankment were encroached when the discharge was 600000 cusecs or so, but the crest was over-topped when the discharge increased further, when all the discharge could not pass through the bridges. The

guide bunds of the railway bridges were designed for the maximum discharge (500000) as per formula laid down by Railway and Road Bridge Committee. The devastation (due to discharge having been more than 500000) was therefore, unavoidable, as no action was feasible when the embankments were overtopped by 3' or so over miles together.

The question now is whether warnings were issued in time. So far as the Irrigation and Waterways staff are concerned it may be said that they have sent messages as laid down in the Flood Rules.

The advance warning comes from Teesta Bazar Gauge which gives about 6 hours time for action to be taken.

The warnings are of four categories:—

- (1) Warning-level crossed rising slowly,
- (2) Warning-level crossed rising rapidly,
- (3) Extreme warning-level crossed rising slowly,
- (4) Extreme warning-level crossed rising rapidly.

The extreme warning-level is slightly below the maximum design discharge-level and therefore if the floods rise rapidly at this level it indicates approach of a very severe flood. It is seen from records that crossing of E.D.L. at 7-30 hrs./rapidly rising was communicated to Kalimpong Wireless at 7-45 a.m. on 4th October 1968 and was transmitted by him to the Jalpaiguri Wireless at 8-20 a.m. on the same day. It may therefore, be stated that the Irrigation and Waterways staff at Teesta Bazar was prompt enough in this matter and his dutifulness (in spite of the dangerous conditions created by land slips on the steep hill slopes at Teesta Bazar) is appreciated. Other warnings were also intimated as laid down in the rules.

It may be mentioned here that the "Crossing of E.D.L./Rising rapidly" at Teesta Bazar is the last word in flood warning from that station and it has probably been the only occasion so far that the said warning had to be issued. No doubt the Jalpaiguri and Barnes embankments stood the test of time but that was in respect of floods corresponding to warnings of a much milder dimension than used during the October (1968) flood. It has, therefore, been most unfortunate if the ultimate warning had been confused with other milder warnings. In any case the position is to be clarified indicating that so far as the Irrigation and Waterways staff engaged for flood warning purposes are concerned they carried out their duties to the last. A draft Press communique is attached.

Yours faithfully,

Sd. R. B. Chakravarty,
Chief Engineer (General).

URGENT

Memo. No. 7740/1(3)-C.I., dated 14th October 1968.

Copy, with copy to Chief Secretary, West Bengal.

Copy, with copy to Superintending Engineer, North Bengal Circle.

R. B. Chakravarty,
Chief Engineer (General).

Attention of the Government has been drawn to the controversy as to whether flood warning in respect of last flood in the Teesta was intimated to the people or not. The Government are making enquiries in the matter but it may be said that the Irrigation and Waterways Directorate staff sent all the messages required under the rules duly, including the message intimating that extreme warning-level had been crossed at Teesta Bazar on the 4th morning and that the gauge was rising rapidly. It is to be appreciated that on the 4th there were severe land slips all along the hill slopes of the Teesta and it shows the dutifulness of the Irrigation and Waterways staff at Teesta Bazar, who carried out his duties efficiently under adverse circumstances even at the risk of his life.

Fact relating to Teesta Bazar Gauge.

For giving advance warning (of approach of floods) to Jalpaiguri authorities, a Gauge Station exists at Anderson Bridge, Teesta Bazar. The following types of warnings are issued from the said gauging station during the rise of flood (similar intimation are given during the falling floods also).

A. At the time of exceeding the warning level (676.00)—

- (a) Danger level crossed—Rising slowly, or
- (b) Danger level crossed—Rising rapidly.

B. At the time of exceeding the extreme warning level (683.00)—

- (c) Extreme danger level crossed—Rising slowly, or
- (d) Extreme danger-level crossed—Rising rapidly.

During the rise of the flood of the 4th/5th October 1968, messages intimating crossing of danger-level and extreme danger-level at Teesta Bazar Station were received at Calcutta as below—

- (a) Crossing of danger-level at 05.30 hrs. on 4th October 1968—
Rising rapidly [vide Annexure (a)].
- (b) Crossing of extreme danger-level at 07.30 hrs. on 4th October 1968—
Rising rapidly [vide Annexure (b)].

Annexure (a)

RADIOGRAM MOST IMMEDIATE SL. NO. 15

TO: DC JPG XEN IRRIGN NBC JPG SE IRRIGN NBC JPG SP
 JPG ADDL CE PWD JPG COMM R JPG DC CBR SDO (CIVIL)
 ATI SP CBR BDO ATI CE NF RLY PANDU CE PWD CAL CE
 EAST IRRGN CAL SECY I & W DEPT CAL SDO IRRGN
 MAYNAGURI BDO MAYNAGURI SDO IRRGN SLG DE NF
 RLY SLG DC DJG SP DJG

FROM: O/C. KALIMPONG P.S.

TEESTA BRIDGE GAUGE CROSSED WARNING LEVEL
 (676.00) AT 05.30 HOURS TO DAY (4.10.68) (.) RISING
 RAPIDLY (.)

TIME OUT 1135/4.10.68. TIME IN 08.27/4.10.68 THI 07.00/4.10.68.
 SENDER HEM CHANDRA GHOSE RECD BY ASI B GOSWAMI

R 187	558
P 243	<u>dated 4.10.68</u>
	4.10.68
	1.10

Forwarded

Sd.

for Inspn.-Genl. of Police,
 West Bengal. 4.10.68.

Copy received.

R. B. Chakravarty,

16-10-68.

Chief Engineer,

Irrigation and Waterways Directorate,

Government of West Bengal.

Annexure (b)

36/35/43/35 W 37 ZOE NR 69-55 GR 82

To: DC JPG XEN IRRGN NBC JPG SE IRRGN NBC JPG SP JPG ADDL CE PWD JPG COMM RLY CBR SDO (CIVIL) ATI SP CBR BDO ATI CE NF RLY PANDU CE PWD CAL CE EAST IRRGN CAL SECY I & W DEP CAL SDO IRRGN MAYNAGURI BDO MAYNAGURI SDO IRRGN SLG DE RLY SLG DC DJG SP DJG

FROM: O/C. KPG P.S.

TISTA BRIDGE GAUGE CROSSED EXTREME WARNING STAGE LEVEL (683.00) AT 07.30 HRS TO DAY (4.10.68) RISING RAPIDLY

Recd. at.

Jalpaiguri.

0820

0745/4

Sd.

4.10.68

Copy received.

R. B. Chakravarty,

16-10-68.

Chief Engineer,

*Irrigation and Waterways Directorate,
Government of West Bengal.*

Fact relating to Domohani and King's ghat Gauges.

Apart from the Advance Warning Gauge at Teesta Bazar messages are also to be sent in respect of Gauges at Domohani and at Kingsghat. The former being on the upstream of the railway bridge at Jalpaiguri indicates the flood-levels on the upstream while that at Kingsghat indicates the flood-levels on the downstream side of the bridge. (The codes of messages are the same as in the case of Teesta Bazar Gauge.)

During the rise of the flood, messages intimating crossing of danger-level and extreme danger-level at gauge stations at Domohani and King's Ghat, were received at Calcutta as below:—

A. Domohani Gauge—

(a) Crossing of danger-level at 17.30 hrs. on 3.10.68—rising slowly [vide Annexure (c)].

(b) Crossing of extreme danger-level at 0.30 hrs. on 4.10.68—rising slowly [vide Annexure (d)].

B. King's Ghat Gauge—

(a) Crossing of danger-level at 02.00 hrs. on 4.10.68—rising slowly [vide Annexure (e)].

(b) Crossing of extreme danger-level—no message received. (It is now understood that King's Ghat Gauge also crossed extreme danger-level at 00 hrs. on 5th October 1968 but the corresponding message was not received at Calcutta obviously due to shortage of time before the flooding.)

Annexure (e)

WB 4-ZP-NRS 36-43 GR 63

DC JPG XEN IRRGN JPG SE IRRGN JPG SP JPG ADDL CE PWD
JPG COMM R JPG DIVN JPG DC CBR SDO (CIVIL) AT 1 SP
CBR BDO ATS CE NF RLY PANDU CE PWD CAL CE EAST
IRRGN CAL SECY 1 AND W DEPT CAL

TO: O/C. MAYNAGURI P.S.

TEESTA AT DOMOHANI GAUGE CROSSED DANGER LEVEL
17 30 HOURS ON 3RD OCTOBER AND RISING SLOWLY

Time in 2138/3.

2000/3

Sd. Illegible.

Copy received.

R. B. Chakravarty,

16-10-68.

Chief Engineer,

Irrigation and Waterways Directorate,

Government of West Bengal.

Annexure (d)

Forwarded
Sd. Illegible.
for Inspri.-Genl. of Police,
West Bengal. 4.10.68.

RADIOGRAM MOST IMMEDIATE SL NO. 44 TL NO. 19

TO: DC JPG XEN JPG SEN JPG SP JPG ADDL
 CE PWD JPG COMM R JPG DIVN JPG DC
 CBR SDO (CIVIL) MEKLIGANJ SP CBR BDO HALDIBARI
 CE NF RLY PANDU CE PWD CAL CE EAST IRRGN CAL SECY
 I AND W CAL

FROM: SDO IRRGN MAYNAGURI

TEESTA AT DAUMOHANI CROSSED EXTREME DANGER
 LEVEL AT 0.30 HRS ON 4.10.68 AND RISING SLOWLY (.)
 TEESTA AT DAMOHANI 1 FT ABOVE EXTREME DANGER
 LEVEL AT 3.30 HRS ON 4.10.68 AND RISING SLOWLY

TIME OUT 1230/4.10.68. TIME IN 1155/4.10. THI 0900/4.
 SENDER HEM CHANDRA GHOSH.

RECD BY ASI BINOY GOSWAMI.

IR 190	561
P 278	dated 4-10-68.
	4-10-68
	1.15

Copy received.

R. B. Chakravarty,
 16-10-68.

Chief Engineer,
Irrigation and Waterways Directorate,
Government of West Bengal.

Annexure (e)

WB 4 ZOO NR 45-52 GR 49.

TO: DE NF RLY SLG DC CBR SP CBR SDO AT I CENF RLY
PANDU CE PWD CAL CE EAST I AND W D CAL SECY I AND
W D CAL BDO ATS SDO IRRG JPG (JALPAIGURI)

FROM: AT TEESTA KING'S GHAT JALPAIGURI CROSSED
DANGER LEVEL AT 0200 HRS ON 4-10-68 AND RISING
SLOWLY

Time in,

0325/4

(0230/4

Sd.

Copy received.

R. B. Chakravarty,

16-10-68.

Chief Engineer,

Irrigation and Waterways Directorate,

Government of West Bengal.

ANNEXURE H**Urgent and Immediate**

4680/62

26th Decr. 1962.

**The Deputy Commissioner,
Jalpaiguri.**

Re: Reinforcement of Jalpaiguri protection work near Rangdhamali.

Dear Sir,

1. If you kindly take the trouble to go to Rangdhamali near Raipur Tea Estate by pitched P.W.D. road up to the junction of the protection work and the road, you will find how serious is the position there. During the last floods the Tista has hugged the outer side of the earthen embankment. The Irrigation Department somehow or other protected the *Immediate* scouring of the earthen embankment by giving some temporary sausages. A look in the locality would convince that the gradient of the country is such that if the Tista river scours the embankment, which it is likely to do in the forthcoming rains, the whole of the Tista river will come in the road side and fall in the Karala, destroying the town completely.

2. Realising this difficulty the Irrigation Department has provided for 11½ lakhs in their budget for necessary boulder protection works.

3. In the meeting of the North Bengal Flood Control Advisory Committee held on 5-12-62, the Chief Engineer, Floods and Flood Control the Superintending Engineer, Irrigation, North Bengal Circle, explained that though 11½ lakhs have been provided for the work, no contractor was forthcoming to do the work due to requisitioning of a large number of public carriers for military purposes.

4. I would therefore, earnestly request you to kindly arrange for releasing such number of trucks as the Irrigation Department want, so that boulders from Terai rivers may be carried to the site and the projected protection works done.

I shall be highly obliged if the matter receives your immediate attention.

Yours faithfully,
B. C. Ghose,
Member, North Bengal Flood
Control Advisory Committee.

Copy forwarded to:—

- (1) The Superintending Engineer, Irrigation and Waterways, North Bengal Circle, Club Road, Jalpaiguri.
- (2) The Executive Engineer, Irrigation Department, Jalpaiguri.

Copy to:—

- (1) The Hony. Secretary, Indian Tea Planters' Association, Jalpaiguri.
- (2) The President, Bar Library, Jalpaiguri.
- (3) The Editor, "Janamat".
- (4) The Editor, "Trisrota".

with request to kindly go one day to see the spot, realise the seriousness and then to support this representation.

ANNEXURE I**FLOOD WARNING RULES**

Name of River—Jaldhaka.

Site of Gauge—Railway Bridge near Nagrakata.

Station under—Executive Engineer, Cooch Behar Irrigation Division, Cooch Behar.

Danger Level—609.04 G.T.S.

Extreme Danger Level—612.04 G.T.S.

1. (a) *Message to be sent by the Gauge Reader at the following stages:—*

- (i) When the Gauge Crosses Danger Level during rise.
- (ii) When the Gauge Crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Danger Level—every day at 6 hours.

1. (b) *Message to be sent as follows:—*

- (i) Nagrakata Gauge crossed Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (ii) Nagrakata Gauge crossed Extreme Danger Level at (time) hours on (date). Raising rapidly/slowly.
- (iii) Nagrakata Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (iv) Nagrakata Gauge dropped below Danger Level at (time) hours on (date).
- (v) Nagrakata Gauge (reading) at 6 hours on (date).

2. *To whom and how the message is to be sent by the Gauge Reader.—* He should immediately transmit the message to the following Officers:—

- (i) Station Master, Nagrakata Railway Station.
- (ii) Officer-in-charge, Nagrakata Police Station.

3. *Action to be taken by the Station Master, Nagrakata.—* He should immediately transmit the message the Station Master, Banarhat Railway Station.

4. *Action to be taken by the Banarhat Station Master.—* He should immediately transmit the message to the S.D.O. Gayerkata Irrigation Sub-division with head-quarter at Banarhat.

5. *Action to be taken by the Officer-in-charge, Nagrakata Police Station.—* He should immediately transmit the message to the Wireless Operator, Jalpaiguri Wireless Station.

6. Action to be taken by the Wireless Operator, Jalpaiguri Wireless Station.—He should immediately transmit the message to the following officers :—

- (i) Executive Engineer, Jalpaiguri Irrigation Division.
- (ii) Superintending Engineer, North Bengal Circle. Over Phone.
- (iii) Deputy Commissioner, Jalpaiguri.
- (iv) Superintendent of Police, Jalpaiguri.
- (v) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (vi) O.S., Kotwali, P.S. Jalpaiguri.
- (vii) Commissioner, Jalpaiguri Division, Siliguri.
- (viii) Deputy Commissioner, Cooch Behar.
- (ix) Superintendent of Police, Cooch Behar.
- (x) Executive Engineer, Cooch Behar Irrigation Division
- (xi) S.D.O., (Civil), Mathabhanga, who will intimate the message to the S.O., Mathabhanga Irrigation Section, Mathabhanga.
- (xii) S.D.O. (Civil), Dinhata.
- (xiii) Chief Engineer, N. F. Railway, Pandu.
- (xiv) Chief Engineer, P.W.D., Calcutta. By Radiogram.
- (xv) Chief Engineer, (East), Irrigation and Waterways Directorate, Calcutta. (vide Irrigation and Waterways Department No. 6107(42)-I., dated 6th September 1968).
- (xvi) Secretary, Irrigation and Waterways Department, Calcutta.
- (xvii) District Engineer, N. F. Railway, Siliguri. (vide Irrigation and Waterways Department, No. 6107(42)-I., dated 6th September 1968).

7. Action to be taken by O/C., Kotwali, P.S. Jalpaiguri.—He should immediately transmit the message to the following officers :—

- (i) S.D.O., Mainaguri Irrigation Subdivision, Mainaguri.
- (ii) Block Development Officer, Mainaguri. Through O/C, Mainaguri P.S.

(Sd.) N. N. MUKHERJEE,
Superintending Engineer,
North Bengal Circle.

FLOOD WARNING RULES

Name of the River—Jaldhaka.

Site of Gauge—N. H. 31 Bridge Crossing.

Station Under—Executive Engineer, Jalpaiguri Irrigation Division.

Danger Level—263.50 G. T. S.

Extreme Danger Level—265.00 G. T. S.

1. (a) *Message to be spent by the Gauge Reader at the following stages:—*

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Danger Level—every day at 6 hours.

1. (b) *Message to be sent as follows:—*

- (i) Jaldhaka N.H. 31 Gauge crossed Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (ii) Jaldhaka N.H. 31 Gauge crossed Extreme Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (iii) Jaldhaka N.H. 31 Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (iv) Jaldhaka N.H. 31 Gauge dropped below Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (v) Jaldhaka N.H. 31 Gauge (Reading) at 6 hours on (date).

2. *To whom and how the message is to be sent by the Gauge Reader:—*
He should immediately send a cycle messenger, till a telephone is installed, to the following officers:—

- (i) Sub-divisional Officer, Mainaguri Irrigation Sub-division.
- (ii) Block Development Officer, Mainaguri.
- (iii) Officer-in-charge, Mainaguri Police Station.

3. *Action to be taken by the Sub-divisional Officer, Mainaguri Irrigation Sub-division:—*He should telegraphically transmit the message to the Sub-divisional Officer, Gayerkata Irrigation Sub-division, Banarhat.

4. *Action to be taken by the Officer-in-charge, Mainaguri Police Station:—*He should immediately transmit the message to the Officer-in-charge, Kotwali Police Station through R.T. or over Phone as available.

5. *Action to be taken by the Officer-in-charge, Kotwali Police Station:—*He should immediately transmit the message to the Wireless Operator, Jalpaiguri Wireless Station.

6. Action to be taken by the Wireless Operator, Jalpaiguri Wireless Station:—He should immediately transmit the message to the following Officers

- (i) Executive Engineer, Jalpaiguri Irrigation Division.
- (ii) Superintending Engineer, North Begnal Circle.
- (iii) Deputy Commissioner, Jalpaiguri. { Over Phone.
- (iv) Superintendent of Police, Jalpaiguri.
- (v) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (vi) Commissioner, Jalpaiguri Division, Siliguri.

- (vii) Deputy Commissioner, Cooch Behar.
- (viii) Executive Engineer, Cooch Behar Irrigation Division. -
- (ix) Superintendent of Police, Cooch Behar.
- (x) Sub-divisional Officer (Civil), Mathabhanga : Who will intimate the message to the Sectional Officer, Mathabhanga Irrigation Circle.
- (xi) Sub-divisional Officer (Civil), Dinhata.
- (xii) Chief Engineer, N. F. Railway, Pandu.
- (xiii) Chief Engineer, P.W.D., Calcutta.
- (xiv) Chief Engineer, (East), Irrigation and Waterways Directorate, Calcutta. [vide Irrigation and Waterways Department, No. 6107(42)-I., dated 6th September 1968.]
- (xv) Secretary, Irrigation and Waterways Department, Calcutta.
- (xvi) District Engineer, N. F. Railway, Siliguri. [vide Irrigation and Waterways Department, No. 6038(32)-I., dated 4th September 1964.]

N. N. MUKHERJEE,
*Superintending Engineer,
North Bengal Circle.*

FLOOD WARNING RULES

Name of river—Teesta.

Site of Gauge—Jalpaiguri (King's Ghat).

Station under—Executive Engineer, Jalpaiguri Irrigation Division, Jalpaiguri.

Danger Level—266.00 G. T. S.

Extreme Danger Level—267.50 G. T. S.

1. (a) *Message to be sent by the Gauge Reader at the following stages :—*

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Langer Level—every day 6 at 6 hours.

(b) *Message to be sent as follows :—*

- (i) Jalpaiguri Gauge crossed Danger Level at (time) hours on (date) Rising rapidly/slowly.
- (ii) Jalpaiguri Gauge crossed Extreme Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (iii) Jalpaiguri Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (iv) Jalpaiguri Gauge dropped below Danger Level at (time) hours on (date).
- (v) Jalpaiguri Gauge (reading) at 6 hours on (date).

2. *To whom and how the message is to be sent by the Gauge Reader.—*
A cycle messenger should transmit the message to the Subdivisional Officer, Jalpaiguri Irrigation Subdivision.

3. *Action to be taken by the Subdivisional Officer, Jalpaiguri Irrigation Subdivision, Jalpaiguri.—*He should immediately transmit the message to the following Officers :—

- (i) Executive Engineer, Jalpaiguri Irrigation Division.
- (ii) Superintending Engineer, North Bengal Circle.
- (iii) Deputy Commissioner, Jalpaiguri.
- (iv) Superintendent of Police, Jalpaiguri.
- (v) Wireless Operator, Jalpaiguri, Wireless Station.
- (vi) Deputy Chief Engineer, P.W.D., Jalpaiguri.

Over Phone
followed up
by written
message.

4. Action to be taken by the Wireless Operator, Jalpaiguri Wireless Station, Jalpaiguri.—He should immediately transmit the message to the following Officers:—

- (i) Commissioner, Jalpaiguri Division, Siliguri.
- (ii) Deputy Commissioner, Cooch Behar.
- (iii) Superintendent of Police, Cooch Behar.
- (iv) Subdivisional Officer (Civil), Mekhliganj.
- (v) Chief Engineer, N. F. Railway, Pandu.
- (vi) Chief Engineer P.W.D., Calcutta.
- (vii) Chief Engineer (East), Irrigation and Waterways Directorate, Calcutta [vide Irrigation Department No. 6107(42)-I., dated 6th September 1968.]
- (viii) Secretary, Irrigation and Waterways Department, Calcutta.
- (ix) Officer-in-Charge, Mainaguri Police Station through Officer-in-Charge, Kotwali Police Station, Jalpaiguri.
- (x) District Engineer, N. F. Railway, Siliguri [vide Irrigation and Waterways Department, No. 6038(32)-I., dated 4th September 1964.]

By
Radiogram.

5. Action to be taken by the Officer-in-Charge, Mainaguri Police Station.—He should immediately transmit the message as received from the Wireless Operator, Jalpaiguri Wireless Station, through the Kotwali Police Station to the following Officers:—

- (i) Subdivisional Officer, Mainaguri Irrigation Subdivision.
- (ii) Block Development Officer, Mainaguri.

N. N. MUKHERJEE,
Superintending Engineer.
North Bengal Circle.

FLOOD WARNING RULES

Name of river—Teesta.

Site of Gauge—Teesta Bazar (Anderson Bridge).

Station under—Executive Engineer, Investigation Division No. II, Siliguri.

Danger Level—676.00 G.T.S.

Extreme Danger Level—683.00 G.T.S.

1. (A) *Message to be sent by the Gauge Reader at the following stages:—*

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Danger Level—every day at 6 hours.

(B) *Message to be sent as follows:—*

- (i) Teesta Bazar Gauge crossed Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (ii) Teesta Bazar Gauge crossed Extreme Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (iii) Teesta Bazar Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (iv) Teesta Bazar Gauge dropped below Danger Level at (time) hours on (date).
- (v) Teesta Bazar Gauge (Reading) at 6 hours on (date).

2. *To whom and how the message is to be sent by the Gauge Reader.—*
By written message to the Officer-in-charge, Police Outpost at Teesta Bazar.

3. *Action to be taken by the Officer-in-charge, Police Outpost at Teesta Bazar.—*He should transmit the message over phone to the Wireless Operator, Kalimpong Wireless Station. If, however, the Kalimpong Wireless Station is out of operation, the message is to be sent over telephone to the Officer-in-charge, Wireless Station at Jalpaiguri (Phone No. JPG-140).

4. *Action to be taken by the Wireless Operator at Kalimpong.—*He should transmit the message as received from the Officer-in-charge, Police Outpost at Teesta Bazar to the Wireless Station at Jalpaiguri,

5. *Action to be taken by the Wireless Operator at Jalpaiguri Wireless Station.*—He should transmit the message as received from the Kalimpong Wireless Station or from the Officer-in-charge, Teesta Bazar Police Outpost over phone as the case may be to the following Officers:—

- (i) Deputy Commissioner, Jalpaiguri.
- (ii) Executive Engineer, Jalpaiguri Irrigation Division.
- (iii) Superintending Engineer, North Bengal Circle. } Over Phone.
- (iv) Superintendent of Police, Jalpaiguri.
- (v) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (vi) Commissioner, Jalpaiguri Division, Siliguri.
- (vii) Deputy Commissioner, Cooch Behar.
- (viii) Subdivisional Officer (Civil), Mekhliganj.
- (ix) Wireless Operator, Malhati Tea Estate, who will transmit the message to the Rescue Officer, Malhati, and the Block Development Officer, Mal Bazar. By Radio-gram.
- (x) Superintendent of Police, Cooch Behar.
- (xi) Chief Engineer, N. F. Railway, Pandu.
- (xii) Chief Engineer, P.W.D., Calcutta.
- (xiii) Chief Engineer (East), Irrigation and Waterways Directorate, Calcutta (vide Irrigation and Waterways Department No. 6107(42)-I., dated 6th September 1968). Through O.C., Kotwali P.S. and O.C., Mainaguri P.S.
- ((xiv)) Secretary, Irrigation and Waterways Department, Calcutta.
- (xv) Subdivisional Officer, Irrigation Subdivision, Mainaguri.
- (xvi) Block Development Officer, Mainaguri.
- (xvii) Subdivisional Officer, Siliguri Irrigation Subdivision. }
- ((xviii)) District Engineer, N. F. Railway, Siliguri (vide Irrigation and Waterways Department No. 6107(42)-I., dated 6th September, 1968). } By Radio-gram.

N. N. MUKHERJEE,
Superintending Engineer,
North Bengal Circle,

FLOOD WARNING RULES

Name of river—Teesta.

Site of Gauge—Domohani.

Station under—Executive Engineer, Jalpaiguri Irrigation Division Jalpaiguri.

Danger Level—274.00 G.T.S.

Extreme Danger Level—276.00 G.T.S.

1. (A) *Message to be sent by the Gauge Reader at the following stages :—*

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Danger Level—every day at 6 hours.

(B) *Message to be sent as follows :—*

- (i) Domohani Gauge crossed Danger Level at (time) hours on (date) Rising rapidly/slowly.
- (ii) Domohani Gauge crossed Extreme Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (iii) Domohani Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (iv) Domohani Gauge dropped below Danger Level at (time) hours on (date).
- (v) Domohani Gauge (Reading) at 6 hours on (date).

2. *To whom and how the message is to be sent by the Gauge Reader.—*

By written message through a Cycle Messenger (until a telephone installed to the following Officers :—

- (i) Subdivisional Officer, Mainaguri Irrigation Subdivision.
- (ii) Block Development Officer, Maiuaguri.
- (iii) Officer-in-charge of Mainaguri police-station.

3. *Action to be taken by the Officer-in-charge, Mainaguri police-station.—*

He should immediately transmit the message through Radio telephone or over phone as available to the Officer-in-charge, Kotwali police-station Jalpaiguri.

4. *Action to be taken by the Officer-in-charge, Kotwali police-station, Jalpaiguri.—* He should immediately transmit the message to Jalpaiguri Wireless Station.

5. Action to be taken by the Wireless Operator, Jalpaiguri Wireless Station.—He should immediately transmit the message as received from Officer-in-charge, Kotwali police-station, to the following Officers:—

- (i) Deputy Commissioner, Jalpaiguri
- (ii) Executive Engineer, Jalpaiguri Irrigation Division,
Jalpaiguri.
- (iii) Superintending Engineer, North Bengal Circle,
Jalpaiguri. ↘ Over Phone.
- (iv) Superintendent of Police, Jalpaiguri.
- (v) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (vi) Commissioner, Jalpaiguri Division, Siliguri.
- (vii) Subdivisional Officer (Civil), Mekliganj.
- (viii) Deputy Commissioner, Cooch Behar.
- (ix) Superintendent of Police, Cooch Behar.
- (x) Chief Engineer, N. F. Railway, Pandu.
- (xi) Chief Engineer, P.W.D., Calcutta.
- (xii) Chief Engineer (East) Irrigation and Waterways
Directorate, Calcutta (vide Irrigation and
Waterways Department No. 6107(42)-I., dated
6th September, 1968). Radiogram.
- (xiii) Secretary, Irrigation and Waterways Department,
Calcutta.
- (xiv) District Engineer, N. F. Railway, Siliguri (vide
Irrigation and Waterways Department
No. 6038(32)-I., dated 4th September, 1964).

N. N. MUKHERJEE,
Superintending Engineer,
North Bengal Circle.

FLOOD WARNING RULES

Name of river—Torsa.

Site of Gauge—Cooch Behar (Keshab Ashram).

Station under—Executive Engineer Cooch Behar Irrigation Division.

Danger Level—124.90 G.T.S.

Extreme Danger Level—126.90 G.T.S.

1. (A) Message to be sent by the Gauge Reader at the following stages :—

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Danger Level—every day at 6 hours.

(B) Message to be sent as follows :—

- (i) Cooch Behar Gauge crossed Danger Level at (time) hours on (date).
Rising rapidly/slowly. Signal red.
- (ii) Cooch Behar Gauge crossed Extreme Danger Level at (time) hour on (date). Rising rapidly/slowly. Signal red.
- (iii) Cooch Behar Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly. Signal red.
- (iv) Cooch Behar Gauge dropped below Danger Level at (time) hours on (date). Signal yellow.
- (v) Cooch Behar Gauge (Reading) at 6 hours on (date).

2. To whom and how the message is to be sent by the Gauge Reader.—

He should immediately transmit the message to the following Officers by a messenger (until a telephone is installed).

- (i) Executive Engineer, Cooch Behar Irrigation Division.
- (ii) Subdivisional Officer, Cooch Behar Irrigation Subdivision.

3. Action to be taken by the Executive Engineer, Cooch Behar Irrigation Division.—He should immediately transmit the message to the following Officers :—

- (i) Deputy Commissioner, Cooch Behar.
- (ii) Superintendent of Police, Cooch Behar. } Over Phone.
- (iii) Wireless Operator, Cooch Behar Wireless Station.

4. Action to be taken by the Wireless Operator, Cooch Behar Wireless Station.—He should immediately transmit the message to the following Officers :—

- (i) Commissioner, Jalpaiguri Division, Siliguri.
- (ii) Superintending Engineer, North Bengal Circle,
Jalpaiguri.
- (iii) Subdivisional Officer (Civil), Tufanganj.
- (iv) Subdivisional Officer (Civil), Dinhatta.
- (v) Chief Engineer, N. F. Railway, Pandu.
- (vi) Chief Engineer, P.W.D., Calcutta.
- (vii) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (viii) Chief Engineer (East), Irrigation and Waterways } By Radiogram.
Directorate, Calcutta (vide Irrigation and Waterways Department No. 6107(42)-I., dated 6th September, 1968).
- (ix) Secretary, Irrigation and Waterways Department, Calcutta.
- (x) District Engineer, N. F. Railway, Siliguri (vide Irrigation and Waterways Department No. 6109(42)-I., dated 6th September, 1968). } J

N. N. MUKHERJEE,
Superintending Engineer,
North Bengal Circle.

FLOOD WARNING RULES

Name of river	... Torsa.
Site of Gauge	... Railway Bridge near Hashimara.
Station under	... Executive Engineer, Cooch Behar Irrigation Division.
Danger Level	... 359.90 G.T.S.
Extreme Danger Level	... 361.90 G.T.S.

1. (A) *Message to be sent by the Gauge Reader at the following stages:*

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Dauger Level—Every day at 6 hours.

1. (B) *Message to be sent as follows:*

- (i) Hashimara Gauge crossed Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (ii) Hashimara Gauge crossed Extreme Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (iii) Hashimara Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (iv) Hashimara Gauge dropped below Danger Level at (time) hours on (date).
- (v) Hashimara Gauge (reading) at 6 hours on (date).

2. *To whom and how the message is to be sent by the Gauge Reader:*
He should send a cycle messenger to the Wireless Operator, Hashimara Police Wireless Station.

3. *Action to be taken by the Wireless Operator, Hashimara W. Stn.:*
He should immediately transmit the message to the following officers by **RADIOGRAM**—

- (i) Commissioner, Jalpaiguri Division, Siliguri.
- (ii) Deputy Commissioner, Cooch Behar.
- (iii) Deputy Commissioner, Jalpaiguri.
- (iv) Superintendent of Police, Cooch Behar.

- (v) Superintendent of Police, Jalpaiguri.
- (vi) Superintending Engineer, North Bengal Circle.
- (vii) Executive Engineer, Cooch Behar Irrigation Division.
- (viii) Subdivisional Officer (Civil), Cooch Behar.
- (ix) Subdivisional Officer (Civil), Tufanganj.
- (x) Subdivisional Officer (Civil), Dinhata.
- (xi) Subdivisional Officer (Civil), Alipurduar.
- (xii) Block Development Officer, Falakata, who should immediately inform Sectional Officer, Irrigation Section, Falakata.
- (xiii) Chief Engineer, N.F. Railway, Pandu.
- (xiv) Chief Engineer, P.W.D., Calcutta.
- (xv) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (xvi) Chief Engineer (East) (I. and W.), Calcutta [*vide* I. and W. Dept. No. 6107(42)-I, dated 6-9-68].
- (xvii) Secretary, Irrigation and Waterways Department, Calcutta.
- (xviii) District Engineer, N.F. Rly., Siliguri [*vide* I. and W. Dept. No. 6107(42)-I, dated 6-9-68].

(N. N. Mukherjee),

Superintending Engineer,

North Bengal Circle.

FLOOD WARNING RULES

Name of river	... Kaljani.
Site of Gauge	... Alipurduar.
Station Under	... Executive Engineer, Coch Behar Irrigation Division.
Danger Level	... 149.13 G.T.S.
Extreme Danger Level	... 151.13 G.T.S.

1. (A) *Message to be sent by the Gauge Reader at the following Stages:*

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Danger Level—every day at 6 hours.

1. (B) *Message to be sent as follows:*

- (i) Alipurduar Gauge crossed Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (ii) Alipurduar Gauge crossed Extreme Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (iii) Alipurduar Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (iv) Alipurduar Gauge dropped below Danger Level at (time) hours on (date).
- (v) Alipurduar Gauge (reading) at 6 hours on (date).

2. *To whom and how the message is to be sent by the Gauge Reader:*

He should send the message through a cycle messenger to the following Officers—

- (i) S.D.O., Alipurduar Irrigation Subdivision.
- (ii) S.D.O. (Civil), Alipurduar Subdivision.
- (iii) Wireless Operator, Alipurduar Wireless Station,

3. *Action to be taken by the Wireless Operator, Alipurduar Wireless Stn.:* He should immediately transmit the message to the following Officer—

- (i) Commissioner, Jalpaiguri Divn., Siliguri.
- (ii) Deputy Commissioner, Jalpaiguri.
- (iii) Deputy Commissioner, Cooch Behar.
- (iv) Superintendent of Police, Cooch Behar.
- (v) Superintendent of Police, Jalpaiguri.
- (vi) Superintending Engineer, North Bengal Circle.
- (vii) Executive Engineer, Cooch Behar Irrgn. Divn.
- (viii) Subdivisional Officer (Civil), Tufanganj.
- (ix) Subdivisional Officer (Sadar), Cooch Behar.
- (x) Chief Engineer, N.F. Rly., Pandu.
- (xi) Chief Engineer, P.W.D., Calcutta.
- (xii) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (xiii) Chief Engineer (East) (I. and W.), Calcutta [*vide* I. and W. Dept. No. 6107(42)-I, dated 6-9-68].
- (xiv) Secretary, I. and W. Dept., Calcutta.

By Radiogram.

4. *Action to be taken by S.D.O., Alipurduar Irrigation Subdivision:*

He should immediately transmit the message by express telegram to the District Engineer, N.F. Rly., Bongaigaon [*vide* I. and W. Dept. No. 6107-(42)-I, dated 6-9-68].

(N. N. Mukherjee),
Superintending Engineer,
North Bengal Circle.

Flood Warning Rules.

Name of river	Mahananda.
Site of gauge	Siliguri rail-cum-road bridge.
Station under	Executive Engineer, Jalpaiguri, Irrigation Division, Jalpaiguri.
Danger level	380.50 G.T.S.
Extreme danger level	382.50 G.T.S.

1. (A) *Message to be sent by the Gauge Reader at the following stages:*

- (i) When the gauge crosses danger level during rise.
- (ii) When the gauge crosses extreme danger level during rise.
- (iii) When the gauge drops below extreme danger level during fall.
- (iv) When the gauge drops below danger level during fall.
- (v) When the gauge is above danger level—every day at 6 hours.

(B) *Message to be sent as follows:*

- (i) Siliguri Gauge crossed danger level at (time) hours on (date) rising rapidly/slowly.
- (ii) Siliguri Gauge crossed extreme danger level at (time) hours on (date) rising rapidly/slowly.
- (iii) Siliguri Gauge dropped below extreme danger level at (time) hours on (date) falling rapidly/slowly.
- (iv) Siliguri Gauge dropped below danger level at (time) hours on (date).
- (v) Siliguri Gauge (reading) at 6 hours on (date).

2. *To whom and how the message is to be sent by the Gauge Reader:*

He should convey the message to the S.D.O., Siliguri Irrigation Subdivision.

3. *Action to be taken by the S.D.O., Siliguri Irrigation Subdivision.—*
He should immediately transmit the message to the following Officers:—

- (i) S.D.O., (Civil), Siliguri.
- (ii) Wireless Operator, Siliguri Wireless Station.
- (iii) Commissioner, Jalpaiguri Division, Siliguri. Over Phone followed up
- (iv) District Engineer, N. F. Railway, Siliguri, over phone followed up by written message or through special messenger. [vide Irrigation and Waterways Department, No. 6038(32)-I., dated 4th September 1964.] by written message.

4. *Action to be taken by the Wireless Operator, Siliguri.*—He should immediately transmit the message to the following Officers:—

- (i) Executive Engineer, Jalpaiguri Irrigation Division.
- (ii) Executive Engineer, Malda Irrigation Division.
- (iii) Superintending Engineer, North Bengal Circle.
- (iv) Deputy Commissioner, Darjeeling.
- (v) District Magistrate, Malda.
- (vi) Superintendent of Police, Darjeeling.
- (vii) Superintendent of Police, Malda.
- (viii) S.D.O., (Civil), Malda.
- (ix) O.C., Phansidewa P.S., who should communicate the message to the Sectional Officer, Irrigation, Phansidewa.
- (x) Chief Engineer, N. F. Railway, Pandu.
- (xi) Chief Engineer, P.W.D., Calcutta. *
- (xii) Deputy Chief Engineer, P.W.D., Jalpaiguri.
- (xiii) Chief Engineer (East), Irrigation and Waterways Directorate, Calcutta [vide Irrigation and Waterways Department, No. 6107(42)-I., dated 6th September 1968].
- (xiv) Secretary, Irrigation and Waterways Department, Calcutta.

By
Radiogram.

N. N. MUKHERJEE,
Superintending Engineer, North Bengal Circle.

FLOOD WARNING RULES

Name of River Diana.
Site of Gauge Railway Bridge near Changmari.
Station Under Executive Engineer, Cooch Behar Irrigation Division, Cooch Behar.
Danger Level 671.31 G. T. S.
Extreme Danger Level 673.31 G. T. S.

1. (A) Message to be sent by the Gauge Reader at the following Stages :—

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Danger—every day at 6 hours.

*

1. (B) Message to be sent as follows :—

- (i) Changmari Gauge crossed Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (ii) Changmari Gauge crossed Extreme Danger Level at (time) on (date). Rising rapidly/slowly.
- (iii) Changmari Gauge dropped below Extreme Danger Level at (time) on (date). Falling rapidly/slowly.
- (iv) Changmari Gauge dropped below Danger Level at (time) hours on (date).
- (v) Changmari Gauge (reading) at 6 hours on (date).

2. To whom and how the message is to be sent by the Gauge Reader :—

He should immediately transmit the message through a cycle messenger to the following Officer :—

- (i) Wireless Station, Upper Changmari Tea Estate.

3. Action to be taken by the Wireless Operator, Upper Changmari T. E. :—

He should immediately transmit the message to the following Officer :—

- (i) Officer-in-charge, Nagrakata Police-Station.

4. Action to be taken by the Officer-in-charge, Nagrakata Police-Station :—

He should immediately transmit the message to the following Officer over wireless—

- (i) Wireless Operator, Jalpaiguri Wireless Station.

5. Action to be taken by the Wireless Operator, Jalpaiguri Wireless Station :—

He should immediately transmit the message to the following Officers—

- (i) Executive Engineer, Jalpaiguri Irrigation Division.
- (ii) Superintending Engineer, North Bengal Circle.
- (iii) Deputy Commissioner, Jalpaiguri.
- (iv) Superintendent of Police, Jalpaiguri.
- (v) Officer-in-charge, Kotwali Police Station, Jalpaiguri.

} Over Phone.

- (vi) Commissioner, Jalpaiguri Division, Siliguri.
- (vii) Deputy Commissioner, Cooch Behar.
- (viii) Superintendent of Police, Cooch Behar
- (ix) Executive Engineer, Cooch Behar Irrigation Division.
- (x) S. D. O. (Civil), Mathabhanga Sub-division who will intimate the Sectional Officer, Mathabhanga } By Radiogram.
Irrigation Section.
- (xi) S. D. O. (Civil), Dinhata.
- (xii) Chief Engineer, N. F. Railway, Pandu.
- (xiii) Chief Engineer, P. W. D., Calcutta.
- (xiv) Deputy Chief Engineer, P. W. D., Jalpaiguri.
- (xv) Chief Engineer, (East), Irrigation and Waterways Directorate, Calcutta. (vide Irrigation and Waterways Department No. 6107(42)-I., dated 6th September 1968.)
- (xvi) Secretary, Irrigation and Waterways Department, Calcutta.
- (xvii) District Engineer, N. F. Railway, Siliguri (vide Irrigation and Waterways Department No. 6107 (42)-I. dated 6th September 1968).

6. Action to be taken by Officer-in-charge, Kotwali Police Station :

He should transmit the message to the following Officers—

- (i) S. D. O., Mainaguri Irrigation Subdivision.
- (ii) Block Development Officer, Mainaguri } Through O. C.,
Mainaguri P. S.

N. N. Mukherjee
Superintending Engineer,
North Bengal Circle.

FLOOD WARNING RULES

Name of river	..	Raidak II.
Site of Gauge	..	Kumargram.
Station under	..	Executive Engineer, Cooch Behar, Irrigation Division, Cooch Behar.
Danger Level	..	251.00 G. T. S.
Extreme Danger Level	..	252.00 G. T. S. (<i>Vide</i> Irrigation Department No. 9071(40)I, dated the 9th December 1965).

1. (A) Message to be sent by the Gauge Reader at the following Stages :—

- (i) When the Gauge crosses Danger Level during rise.
- (ii) When the Gauge crosses Extreme Danger Level during rise.
- (iii) When the Gauge drops below Extreme Danger Level during fall.
- (iv) When the Gauge drops below Danger Level during fall.
- (v) When the Gauge is above Danger Level—every day at 6 hours.

1. (B) Message to be sent as follows :—

- (i) Kumargram Gauge crossed Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (ii) Kumargram Gauge crossed Extreme Danger Level at (time) hours on (date). Rising rapidly/slowly.
- (iii) Kumargram Gauge dropped below Extreme Danger Level at (time) hours on (date). Falling rapidly/slowly.
- (iv) Kumargram Gauge dropped below Danger Level at (time) hours on (date).
- (v) Kumargram Gauge (Reading) at 6 hours on (date).

2. To whom and how the Message is to be sent by the Gauge Reader—

He should convey the message to the Officer-in-Charge, Kumargram police-station.

3. Action to be taken up by the Officer-in-Charge, Kumargram police-station—

He should immediately transmit the message by Radio Telephone to the Wireless Operator, Alipurduar.

4. Action to be taken by the Wireless Operator, Alipurduar—

He should immediately transmit the message to the following Officers—

- (i) Subdivisional Officer (Civil), Alipurduar .. }
- (ii) Subdivisional Officer, Alipurduar Irrigation Division. } Over Phone.

- (iii) Commissioner, Jalpaiguri Division, Siliguri
- (iv) Executive Engineer, Cooch Behar Irrigation Division.
- (v) Superintending Engineer, North Bengal Circle
- (vi) Deputy Commissioner, Cooch Behar ..
- (vii) Deputy Commissioner, Jalpaiguri ..
- (viii) Superintendent of Police, Cooch Behar.
- (ix) Superintendent of Police, Jalpaiguri
- (x) Subdivisional Officer (Civil), Tufanganj .. ↗ By Radiogram.
- (xi) Chief Engineer, N. F. Railway, Pandu ..
- (xii) Chief Engineer, P. W. D., Calcutta ..
- (xiii) Deputy Chief Engineer, P. W. D., Jalpaiguri
- (xiv) Chief Engineer, East Irrigation and Waterways Directorate, Calcutta.
- (xv) Secretary, Irrigation and Waterways Department, Calcutta.

5. Action to be taken by Subdivisional Officer, Alipurduar Irrigation Subdivision

He should immediately transmit the message by express telegram to the District Engineer, N. F. Railway, Bongaigaon. (*Vide Irrigation and Waterways Department No. 6107(42)-I*, dated the 6th September 1968).

N. N. MUKHERJEE,
Superintending Engineer,
North Bengal Circle.

CONFIDENTIAL

ANNEXURE J

WEST BENGAL SECRETARIAT
Home (Civil Defence) Department

Shri K. Sen, ICS, Director of Civil Defence.

Calcutta, the October 25, 1968.

D.O. No. 1358/PA/68.

My dear Mr. Ray,

I enclose a copy of a report from Subedar H. G. Bhattacharjee of the M.C. E. F. Training Centre at Jalpaiguri.

Yours sincerely,

K. Sen.

Shri S. N. Ray, ICS,
 24/1, Ballygunge Circular Road,
 Calcutta-19.

Dated 18th October, 1968.

To

The Commandant
 MCEF/Calcutta.

(through : The D. C. M. C. E. F., Camp Jalpaiguri).

Sir,

I place below a report on the performance of M. C. E. F. Members with effect from 3rd October 1968 upto date.

On 3-10-68 . . Received telephonic message from Kotwali P. S. Jalpaiguri that a big tamarind tree has fallen over the main road near the crossing of hospital Road, and Dinbazar bridge, causing electric fire and damage to house, obstructing vehicular traffic. The message was received at 19.00 hours of 3/10. The O/C personnally attended along with Jcm. Dutta and a team of 8 members of M. C. E. F.

On returning to Camp subsequently got another message regarding electric fire at Dinbazar. Contacted the Local Fire brigade but their engines were out, hence the O/C took the turn out with MCEF fire JEEP. Just while approaching to the fire site the local fire brigade which was returning from fire call on that side arrived at the site and hence the job was handed over to them,

On 3 10-68 .. On returning to the Camp at about 21·15 hours received message from S. D. O. (Sadar) that raining has been 275 M. L. and the people near Pilkhana and Char island should be warned to take proper shelter. I requested S. D. O. to convey the message to Kotwali P. S. also. I enquired from P. S. but the duty officer said that he had no man to give the warning, so I personally took the initiative and through MK. M. R. Das and 2 MCEF members gave warning to the Pilkhana Coloney, Char island could not be approached without boat. The boys walked through knee deep water to Pilkhana Coloney for giving warning.

Received instructions within 20 minutes that Rescue team should proceed to Mandalghat. The O/C along with a team of 10 members and A. R. O. Sri Kar left for Mondalghat in Rescue Vehicle. On way near about 3 K. M. distance from Kadubari the flood water was seen running on the main road. The vehicle was left over and team walked through water, shouted out but there came no response from any end. No boat was available. Returned to the Camp appraised of it to S. D. O.

On 4-10-68 .. Early hour at 05·00 the O/C along with Jem. Dutta, 13 MCEF members, 1 S. I. of Police and 6 police members left for Mondalghat for operation. Jem. Maity was left to accommodate the persons living their homes from Pilkhana, etc., in our lecture hall and other available rooms. Attempt was made to carry one steel made boat of 32' of P. W. D. but for want of suitable truck the same could not be taken. It could neither be carried in our Rescue vehicle for its abnormal length, width. Arrived at the same place and walked on towards Kadubari through Flood water. Reached on Railway line side. The flood water was soon damaging 3 places on the Railway track. Immediately started placing Stones, Bricks, etc., but water made its way from other side. Procured with great difficulty country Boats and rescued 9 persons from flooded huts. 2 persons more were rescued wonderfully by Constable A. Satter from a flooded hut at a distance of 30 yds. from the Railway track. The rescue operation started from 11·40 hours and ended at 19·05 hours. Attempt was made to other houses but none else was seen trapped inside. Thus the rescue operation by MCEF exclusively was done at Phandiatpara near Kadubari Hut. The Police personnel were not utilised. The payment of these boats were made by the O/C from his own. By 16·00 hours the Railway track on eastern side near points-man room on Phandiatpara got damaged, the people on other side was immediately rescued and sent crossing the Wooden Bridge to their known places. At about 18·05 hours came back to Kadubari Hut and found that distribution of Chira and gur has already been started through the Anchal Pradhan, sent by B. D. O. (Sadar). At the Rescue site the B. D. O., Sri Subodh Sen, M. L. C., Sri Jiban Maitra, Warden, visited and observed the action of MCEF. Some C. D. volunteers brought by Sri Jiban Maitra also co-ordinated with MCEF in tying the ropes, etc. The Army arrived at Kadubari site and their convoy carrying boats were seen near our Rescue Vehicle (at a distance of about 4 K. M. from the place of operation. The O/C MCEF, contacted with the Captain, the O/C of the Army Unit (Engineers) and gave him the idea from where their action will help the authorities and local men. The Captain was

- On 4-10-68 .. requested by the O/C MCEF to contact the rice mill side at Mondalghat early morning where our team could not approach for want of adequate staff and boat communication as the place was completely cut off. The Captain was pleased with the suggestion. This suggestion was also confirmed by the B. D. O. (Sadar) who too came at the spot by 2000 hours before the departure of MCEF from the site.
- On 5-10-68 .. Received telephonic message at Camp from D. C., Jalpaiguri, to attend near Try. embankment as the Try. Police duty men had suspected some hole near the embankment. The O/C though informed the D. C. Jalpaiguri to attend the same early morning (as the rain water had accumulated and it was difficult to ascertain whether there may have been any hole through the accumulated water), still the O/C personally and alone went to the site but no Police Guard near Try. was seen. The water from the Karala bridge site up to Try. was up to the waist level i. e. 3 1/2 feet. No flow of flood water was seen near the embankment by the side of Income Tax Building opposite to Try.
- Received telephonic message from D. C., Jalpaiguri, (in the dead night) while the electricity went off that 1 women with 2 children trapped inside house near SISHUMAHAL. Attempted with 4 members of MCEF but due to heavy water pressure could not approach. Searched for boat, none seen. The whole town was in deep slumber. Returned back, tried to contact D. C., Jalpaiguri, over phone but the exchange reported line defective. Thus the O/C with his team became handicapped for want of boat.
- Early morning Sri D. K. Sanyal, Deputy Magistrate approached to O/C for help to shift his family and others to Fire Brigade's 3 storied building. The O/C along with him went to embankment and found the water level about 2 feet distance from embankment, there was no sign of overflowing the embankment near Race Course, still as a precautionary measure 2 families (ladies and children) were carried and placed in our Rescue vehicle. The others did not agree to vacate at that moment. Just the Vehicle was going to move, the O/C detected that water from Police line and Main Road was approaching at a high speed increasing the level inside town. Constable D. Pandit was asked not to move with vehicle and park the same at any cost to save it. Constable/Driver D. Pandit's care and dutifulness are highly commendable and a separate report on that is being forwarded. The O/C had to approach Camp by swimming against the current and he was compelled to ask the people accommodated within the campus to take shelter in Fire Brigade (these people came from Pilkhana Colony and some from Mondalghat-flood affected) and called the boys and officers to remove store articles as far as practicable to the top of main building.
- But within a minute the water tide entered into the Camp in such a way and the women and children rescued from Colony by Jem. Maity on the previous day made hue and cry that the M. C. E. F. boys started helping them coming out from the rooms and leave for Fire Brigade building. Constable Ranjit Das was on duty in the office with his help the records were placed on

On 5-10-68 . . cots and the Officer-in-Charge then with the help of 2 J. C. O.'s and Naik M. R. Das and Clerk Maity could save his youngest daughter. The eldest daughter and his wife swam out from the quarter and climbed on the top of main building by ladder.

The ladder was then placed over the flood water, tied with ropes on two ends and 2 at a time one on the head-side on right and one on the head-side on left balancing their weight was pulled with rope in one corner, taken on the top of main building by ladder and again pulled on the other side. About 45 men, women, children were thus rescued from the verandah of J. C. O.'s Block and by another ladder placed in between J. C. O.'s block and office were brought to J. C. O.'s block by making the ladder as a bridge. Thus the ladder's helped everyone, viz., as a bridge inside water, and as a boat from J. C. O.'s block to main building and then for climbing on the top of main building. It was a new experience gathered what a useful purpose can the ladders serve when no boat is available.

On the top of main building tarpaulins were placed, some wooden cots taken with the help of rope and the women and children were given shelter from rain. There was no drinking water, one could think so early they will have to face the calamity. The Officer-in-Charge was able to procure 1·1/2 tin of drinking water from the overhead tank, as the Municipal pump and electric supply generators were flooded so there was no supply of water. Whatever left in the tank out of previous day supply was 1·1/2 tin. Out of this 1/2 tin was sent per Naik Manoranjan Das and Constable A. Satter to southern block where over tin shed roof M. C. E. F. boys were staying and 1 tin water was distributed strictly amongst the women and children and managed for 36 hours after which tubewell water after flood water gradually receded was made available for all. Thus all male members (public) including Officer-in-Charge, 2 J. C. O.'s, 3 N. C. O.'s and 4 Constables of M. C. E. F. on the top of main building remained without a drop of water for 36 hours. After this the 1/2 bag CHIRA which was left at Office room by the Relief Officer after distribution amongst Pilkhana people, was brought and found mixed with silt water. But the time was such that none objected and that was distributed to all by Officer-in-Charge personally in the main building (top) and Southern block (tin roof). Shri Rabin Mitra, Contractor, came at about 13-00 hours and opened his store and was kind enough to hand over his damaged rice and Dal to Officer-in-Charge with which the rescued persons including N. C. E. F. could live for 6-10-68 (AN) and 7-10-68. The khichuri was prepared both the time without salt.

On 6-10-68 . . On 6-10-68 the Officer-in-Charge detachment went to police-station where only the scene of disaster was visible and policemen recovering their belongings amidst flood water. No telephone communication, the 5 bridges over Karala completely washed away, Deputy Commissioner could not be contacted. Local Officers all worried about their loss, damage and family members. The Officer-in-Charge had to return to camp as such. The Constable/Driver, D. Pandit and Cook Chandan Oraon was contacted over embankment, they were found O. K. and about 35 men were using the vehicle as their temporary shelter.

- On 7-10-68 ..** Early morning the Officer-in-Charge met with C. M. O. for vaccine against epidemic. The C. M. O. wanted the help of M. C. E. F. in bringing out the medicines from his stores placed in different places by breaking locks and M. C. E. F. did that. 1,000 ampules of T. A. B. C., Sulfaquadine and Entroquinole at 4,000 each were brought by Officer-in-Charge and a medical Centre was opened in the Camp. The rescue vehicle was the only vehicle in running condition which was immediately given at the disposal of Deputy Commissioner for connecting the officials and responsible citizens to start with Relief Works and the police-station was made the main Relief and Co-ordination centre. The Officer-in-Charge contacted with Director of C. D. over phone and appraised him of the situation., as per his instructions and order of Deputy Commissioner the M. C. E. F. started functioning Milk Centre, Medical Centre and Gruel Kitchen, Storage of Rice at Old A. C. College with the help of some local men.
- On 8-10-68 ..** As per order of local authority the Officer-in-Charge with Jem. Dutta and 12 Constables and 1 N. C. O. started removal of dead cattles and human bodies from 0700 hours. The local public also volunteered for this service.
- Thus it will be seen that the M. C. E. F. detachment inspite of their personal sufferings have been working day and night with effect from 3-10-68 as above and particularly after flood as below :—
- On 4-10-68 ..** Rescued persons at Phandiatpara, (Kadubari) Mondalghat area (Operation by Officer-in-Charge with Jem. Dutta and 12 Constables and 1 N. C. O.).
- On 4-10-68 ..** Rescued men, women and children from Pilkhana Colony (Operation by Jem. Maity with Class IV staff and N. C. O.s and 2 Constables).
- On 5-10-68 ..** Rescued men, women and children of about 45 from near about Camp and helped women and children for their movement from our Campus to new Fire Brigade building. The 45 numbers mentioned above were taken on the top of main building and given shelter. Movement helped to those who were rescued from Pilkhana and living in the Campus numbering about 130.
- On 7-10-68 ..** The first and only Medical Centre was opened at M. C. E. F. Camp, manned by M. C. E. F. members from 11.00 hours. Rice arrived from Siliguri (80 bags) were unloaded stores and distribution started by M. C. E. F. as per direction of local authorities.
- On 8-10-68 ..** Gruel kitchen opened from 04.30 hours, served cooked Rice to more than 4,500 people (Town and Rural area).
- (160 bags
Rice
stored).
- Medical Centre continued. Milk Centre opened (from 07.00 hours). Removal of Corpse and Carcasses started from 07.00 hours.
- On 9-10-68 ..** Sub. Gangulya Party re-inforced in Corpse and Carcass work. Gruel kitchen supplied cooked rice to more than 4,500 people. Milk Centre continued. Medical Relief Centre in Camp continued.

On 10-10-68	Jm. Paul's Pte reinforced in Corpse and Carcasses work. Milk Centre, Medical Centre continued. Gruel kitchen supplied cooked rice to more than 5,000 people (sufferer, N. V. F. personnel and M. T. Staff arrived from different places on requisition of the district authorities).
On 11-10-68	In addition to Corpse and Carcasses disposal Silt Clearance taken up. Milk Centre, Medical Centre continued. Gruel kitchen served cooked rice to more than 2,200 people.
On 12-10-68	Corpse and Carcasses disposal, Silt Clearance, Milk Centre, Medical Centre, Gruel kitchen continued R. T. Stations opened by M. C. E. F. at Changmari, Kranti, Kadubari and J. G. P.
On 13-10-68 to 18-10-68.	Performance of M. C. E. F. continued as above.
On 19-10-68	R. T. Stations opened at Mal and Raja Danga shifted from Changmari.
On 20-10-68	Performance of M. C. E. F. continuing as above.
Up to 20-10-68	At Gruel Kitchen ... More than 20,000 (Twenty thousand people). (M. C. E. F.).
Medical Centre	T. A. B. C. and Cholera inoculation given to 7,400 people. (500 T. A. B. C. ampule at 10 men) 100 T. A. B. C. ampule at 10 men) 100 Cholera ampule at 7 men) 100 Cholera ampule at 7 men) In addition treatment for fever, septic, dysentery, etc., has been given to 445 people.
Milk Centre (M. C. E. F.).	More than 6,500 babies and invalids have been supplied milk.
Removal of dead cattles, etc.	About 105 removed by Sub. Bhattacharjee's Party. About 250 removed by Sub. Ganguly's team. About 200 removed by Jem. Paul's team.
Removal of dead bodies.	1 (One) aged about 36 years removed by Sub. Bhattacharjee's team at Race Course. (Male) 2 (Two) Female, one aged and other young removed from New Town area and Pandapara by Sub. Ganguly's team. 2 (Two) Female, one aged and young removed from Race Course area and Pandapara by Jem. Pauls' Party.

In addition to above, Silt Clearance and Dumping work has been done by Sub. Ganguly and Jem. Paul's parties.

From 17-10-68, M. C. E. F. is also manning the centre "CARE" kitchen for babies at Deshbandhu H. E. School, Pandapara and taken up clearance of WARE HOUSE with effect from 19th October 1968.

The Gruel kitchen, Medical Centre, Milk Centre is continuing. From 21st October 1968 the M. C. E. F. will function as below :—

M. C. E. F.

Communication (R/T).	Clearance Dumping Ware House.	and at	(1) Running of Gruel Kitchen. (2) Running of Milk Centre. (3) Running of Medical Centre.	Miscellaneous work on requisition of Deputy Commissioner, Jalpaiguri and Shri R. K. Gupta, I. P., Deputy Inspector-General.
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The presence of Capt. (Dr.) S. K. Mukherjee, M.O./D. C. M. C. E. F. in this, situation has been very much helpful to the Officer-in-Charge, Detachment as well as to the District Authorities and other sufferers.

Submitted.

Sd./ **H. G. BHATTACHARJEE**

Dated—20-10-68.

Officer-in-Charge,

**M. C. E. F. (Cal.) Detachment,
Jalpaiguri.**

